This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

SIGILLVM · VNIVERSITATIS · CALIFORNIENSIS
FIAT LVX
MDCCCLXVIII
EX LIBRIS

1·00 n

gal 9m
1r

PRACTICAL HARMONY

A COMPREHENSIVE SYSTEM OF MUSICAL THEORY ON A FRENCH BASIS

BY

HOMER A. NORRIS

PART I. CONSONANCE PART II. DISSONANCE
PART III. KEY TO HARMONY

UNIV. OF
CALIFORNIA

PHILADELPHIA
THEODORE PRESSER CO.

MT50
N6
v.2

Copyright, 1894,
BY
H. B. Stevens Company
Boston

Copyright secured in England

Copyright transferred, 1903, to
Theo. Presser

CONTENTS.

PART II.

DISSONANCE.

CHAPTER I. PAGE 3
Chord of the Dominant Seventh,— Dominant Seventh without root.

CHAPTER II. PAGE 24
Chord of the Dominant Ninth,— The Major Ninth,— Major Ninth without Root,— Chord of the Minor Ninth,— Minor Ninth without Root.

CHAPTER III. PAGE 39
Secondary Sevenths.

CHAPTER IV. PAGE 48
The Altered Chords.

CHAPTER V. PAGE 78
Suspensions,— Retardations,— The Pedal.

CHAPTER VI. PAGE 97
The Anticipation,— The Appoggiatura,— The Embroidery,— Irregular Resolutions,— Passing notes.

CHAPTER VII. PAGE 109
Analysis,— Chords of the Dominant Eleventh and Dominant Thirteenth.

238231

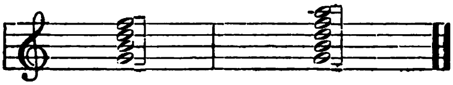
UNIV. OF
CALIFORNIA

PRACTICAL HARMONY.

PART II.

DISSONANCE.

All chords formed of more than three notes are called dissonant chords. Their names are derived from the interval to be found between the extreme notes when the chord is arranged in a series of thirds. If the interval between these notes is a seventh, the chord is named a chord of the seventh; if the interval between these notes is a ninth, the chord is named a chord of the ninth:



The chief characteristic of dissonance is incompleteness; by it the mind is carried on in anticipation of something which must follow. This nervous striving for resolution gives to dissonance a life, an impulse and a spirit foreign to consonance.

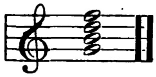
Dissonant chords are divided into two principal groups. The first group is formed of those chords which emphasize, or make more definite, a tonality; — these need no preparation.

The second group is formed of those which are the result of a prolongation of a preceding consonant interval; — dissonances of this second order should be prepared.

DISSONANCE OF THE FIRST ORDER.

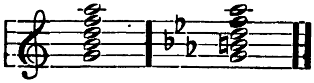
All dissonant chords having for their generator the dominant of either mode, require no preparation. The following is a complete list of these chords:

Chord of the dominant seventh in C major or C minor.

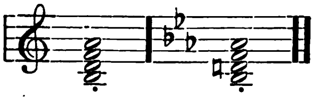


Chord of the dominant ninth.
(Extension of the dominant seventh chord.).

C major. c minor.

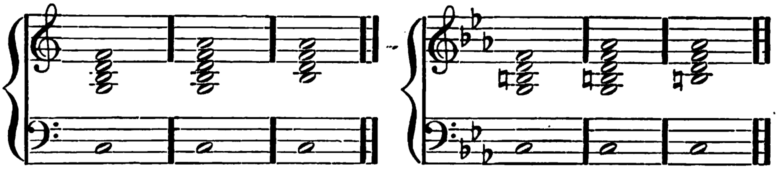


Chord of the leading-tone seventh.
(Dominant ninth without root.)



Chords of the tonic eleventh, and the tonic thirteenth.
(Chords of the dominant seventh, the dominant ninth, or the leading-tone seventh, placed on a tonic.)

C major. c minor.



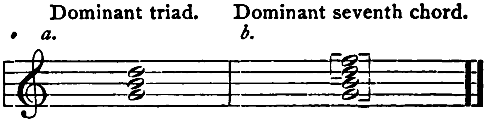
Note. These chords of the tonic eleventh and tonic thirteenth include those combinations so often puzzling to the student, which apparently contain parts of two chords.

CHAPTER I.

CHORD OF THE DOMINANT SEVENTH.

The chord of the dominant seventh is formed by adding another third to a dominant triad:

Ex. 1.



It is of the utmost importance that the pupil shall understand that a dominant seventh chord is always formed of the intervals of a major third, a perfect fifth, and a minor seventh.

This chord is the same in either the major or the minor mode. When heard *alone*, i.e.; with no other chord preceding or succeeding it, it determines a tonality. The chord in example 1, *b*, can belong to no tonality other than that of C major or c minor. The F natural precludes the possibility of its belonging to any key with sharps, and the B natural precludes the possibility of its belonging to any key with flats.

The characteristic which this chord has, of absolutely defining a tonality, gives great prominence to the degree of the scale upon which it is placed. For this reason, it is much employed in cadences. It gives a precision or definiteness to a key which it is impossible to gain by the use of consonant chords. This is because any single consonant chord may belong to several tonalities. (See Part I, Chapter IX, examples 133 to 136 inclusive.)

Note. The dominant seventh chord is so powerful a factor in modulation, that some text-books on harmony do not treat the subject of modulation in any form until this chord is introduced. A few theorists claim, that, as a consonant chord forms a satisfactory point of repose, i.e.; that no resolution is necessary, no definite modulation can take place with the use of consonant chords only. Modulation is certainly much more clearly defined with the aid of dissonant chords, but we can argue that the moment chords are introduced *foreign* to a tonality, we *leave* that tonality. At this point a fine discrimination must be made between passing chords (see Part I, Chapter IX, example 139) and real modulation. It is hoped that the concluding exercises in Chapter IX, Part I, made it clear that definite modulation *can* be accomplished by consonance only. It is certainly an advantage to take up the study of dissonance with the fundamental principles of modulation well understood.

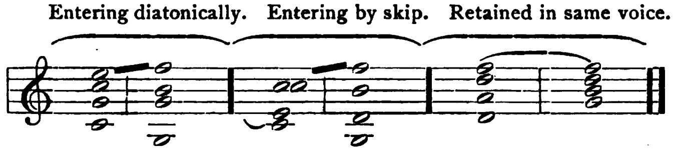
DOMINANT SEVENTH.

CONTINUED.

Preparation. The chord of the dominant seventh, on account of its harmonic importance, is called the seventh chord of the first order, or the Primary Seventh.

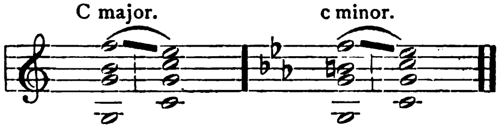
The seventh of this chord may enter without preparation, either diatonically or by skip. If, however, the seventh appeared in the preceding chord, it is usually desirable to retain it in the same voice:

Ex. 2.



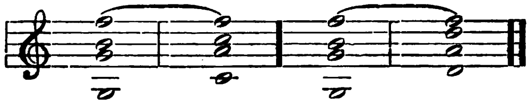
Resolution. The regular, or school resolution of dissonance was given in Chapter VII: the dissonant note should resolve diatonically to the next degree below to the *third* of the chord. In major keys the seventh should resolve down a minor second; in minor keys the seventh should resolve down a major second:

Ex. 3.

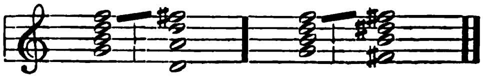


Irregular Resolutions. The so-called irregular resolutions are the same as those given in Chapter VII: the seventh, in place of resolving diatonically downward, may remain stationary, forming a part of the succeeding chord:

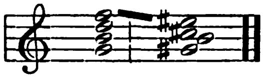
Ex. 4.



or it may resolve chromatically upward:

Ex. 5.


or it may resolve enharmonically:

Ex. 6.


Irregular resolutions like those in examples 5 and 6 usually imply a change of key.

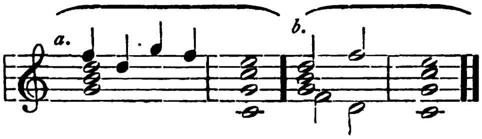
Three resolutions, then, are possible for any dissonant note whatsoever:

The dissonant note may descend diatonically;

The dissonant note may remain stationary;

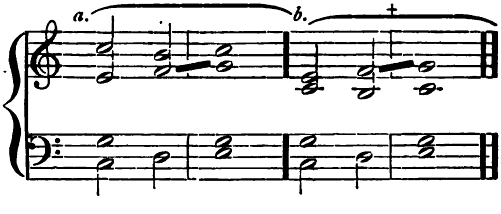
The dissonant note may ascend chromatically.

The seventh often passes to another note of the same chord, as at *a*, example 7, or it may exchange with another voice, as at *b*.

Ex. 7.


The illustrations under example 7 are classed by some theorists as irregular, but, as the seventh finally makes a resolution it is not "irregular;" it is interrupted, or prolonged.

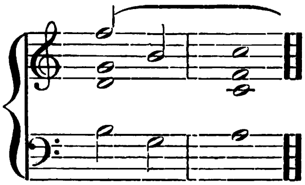
The seventh may ascend when another voice takes its resolution:

Ex. 8.


At *a*, the seventh, which appears in the alto, is resolved in the bass. At *b*, the same is relatively true of the soprano and the bass. The consecutive fifths which occur at *b* between the soprano and alto (marked +) are not objectionable, because the last chord stands in its first inversion.

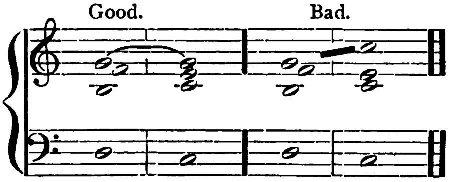
A dominant seventh chord is sometimes transformed into a triad, and in such a way that the dissonant note is not resolved:

Ex. 9.



It will be remembered that in the resolution of a six-four chord, one of the notes forming the perfect fourth should remain stationary, making a part of the succeeding chord. When a dominant seventh chord stands with its fifth in the bass, the root of this chord, i.e.; the dissonant fourth above the bass note, should be held over, forming a part of the succeeding chord:

Ex. 10.

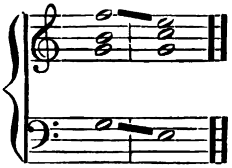


The example above (10) is important.

There are exceptions to this rule, in cases where the dominant seventh chord is not followed by its tonic, which will be explained later.

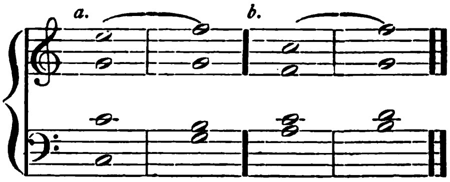
It usually produces a bad effect for another voice to move in similar motion to the note of resolution of a dissonance. Between outside parts especially, such a progression forms one of the worst possible hidden octaves:

Ex. 11.



Similar motion to a root and a seventh rarely produces a good effect, unless *one* of the two notes forming the interval of the seventh appears in the preceding chord:

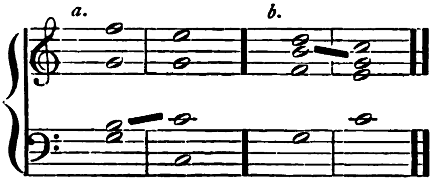
Ex. 12.



The two notes forming the interval of a seventh at both *a* and *b* are G and F. At *a* the G is prepared; at *b* the F appeared in the preceding chord in the alto voice. The progression at *b*, with all voices moving in similar motion to the second chord, would be forbidden did it not appear in its first inversion. (See Part I, Chapter X, example 168.)

The dominant seventh chord, in addition to the dissonant seventh, contains another note which must be carefully resolved. This note is the third of the chord, which is always the leading-tone of the key. The rules given in Chapter II regarding this note, apply here. (See example 27.) The leading-note most often ascends to its tonic, as at *a*, but not infrequently it descends to the fifth when the bass ascends to the tonic, as at *b*:

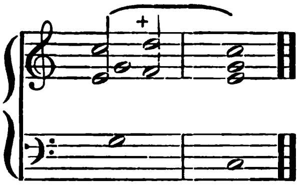
Ex. 13.



Besides these resolutions, the leading-tone may, like the seventh, remain either stationary, or change chromatically, or enharmonically.

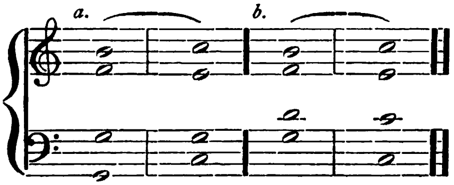
The third of a dominant seventh chord is frequently omitted. The seventh is so full of tone-color, that the omission of the third is hardly noticed:

Ex. 14.



The fifth is often omitted in a dominant seventh chord in a concluding phrase, in order to gain a full closing chord:

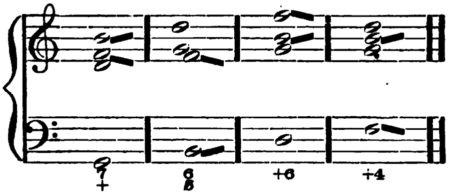
Ex. 15.



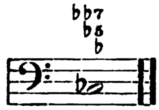
For this reason, the disposition of the voices at *a*, is preferable to that at *b*.

The dominant seventh chord, like triads, may be inverted, i.e.; any interval of the chord may appear in the bass. The French method of figuring this chord in its root position and inversions is as follows:

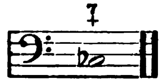
Ex. 16.



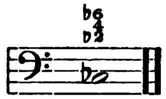
The cross (+) indicates a leading-tone. A line (—) traversing a figure always indicates that the interval represented by the figure through which the line is drawn is to be diminished. This system of figuring is much simpler than is the older, and has the advantage of forcing the pupil to determine for himself the key he is in, i.e; the accidentals necessary for the formation of the dominant seventh chord. With the older figuring, he often carelessly placed the accidentals as demanded by the figures and chromatic signs, without realizing the tonality in which they occurred. The simplicity of the French system may be easily demonstrated: if a dominant seventh chord were to be written on a C flat, it would be necessary, with the older system, to use the following characters:



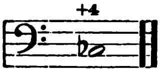
while with the newer system one figure ($\underset{+}{7}$) is sufficient:



If a dominant seventh chord in its third inversion were called for on C flat, it would be necessary, with the older system, to use the following characters:



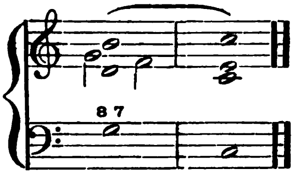
while with the French system, all that is necessary is the figure +4:



These examples, which could be multiplied, are sufficient to prove the greater desirability of this system.

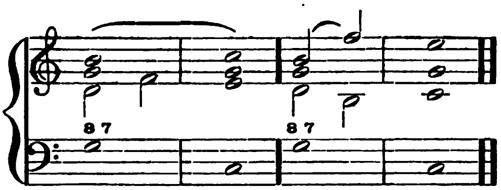
The figures 8, 7, standing over a note, signify that the chord underneath is to first appear as a triad, and then as a chord of the seventh:

Ex. 17.



The voice which first held the octave, i.e.; the eighth, need not necessarily descend to the seventh, as above. Either of the three upper voices may take the seventh:

Ex. 18.



Note. The student should bear in mind that the figures, 3, 5, or 8, usually signify only that the chord of the given bass note is to be written above. (See Part I, Chapter V.) When a chord is *repeated*, either of these figures usually shows the position of the soprano.

As in triads, so in dissonant chords, the more important intervals only are usually indicated. A triad, to be fully represented, would need the figures $\begin{smallmatrix}8\\5\\3\end{smallmatrix}$. A seventh chord, to be fully represented, would need the figures $\begin{smallmatrix}7\\5\\3\end{smallmatrix}$. The lower two figures are suppressed in representing either of these chords.

Briefly, the figuring of the dominant seventh chord in its different positions is as follows:

$\begin{smallmatrix}7\\+\end{smallmatrix}$ signifies a chord of the dominant seventh with its root in the bass.

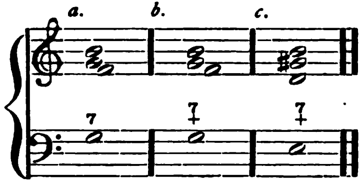
$\begin{smallmatrix}6\\\not 5\end{smallmatrix}$ signifies a chord of the dominant seventh with its third in the bass.

+ 6 signifies a chord of the dominant seventh with its fifth in the bass.

+ 4 signifies a chord of the dominant seventh with its seventh in the bass.

When no chromatic change has to be made to form the major third of a dominant seventh chord, i.e; when the scale signature furnishes the correct interval, the cross is sometimes omitted. In the following example the figuring at *a*, without the cross, is as definite as that at *b* with the cross. At *c* the cross is necessary in order to indicate that the third is to be major:

Ex. 19.



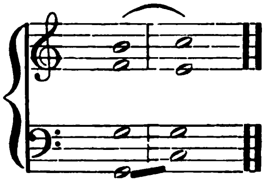
As in triads, so in dissonant chords, the root is, as a rule, the best note to double, although it will be seen, later, that the third, and sometimes the seventh, may be doubled with good effect.

DOMINANT SEVENTH CHORD.

ITS RESOLUTION.

Among those chords which may follow a dominant seventh chord the one which our musical instinct seeks as that the most satisfying, is its tonic. The root of this is found a fourth above (or a fifth below) the root of the dominant seventh chord:

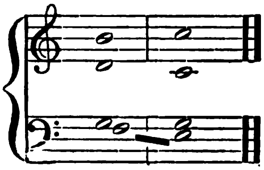
Ex. 20.



The most natural resolution of a dominant seventh chord is, like the above, to its tonic.

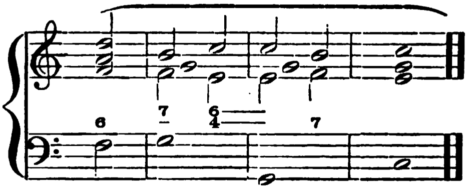
Whether or not the tonic chord succeeding the seventh chord shall appear in its root position, as at example 20, depends largely upon which voice holds the seventh of the chord. If the seventh occurs in the bass, the succeeding chord will usually stand in its first inversion, in order that the dissonant note may resolve downward:

Ex. 21.



With the other three positions the tonic chord will most naturally stand in its root position, although it is not infrequently found standing in its second inversion in a cadence like the following:

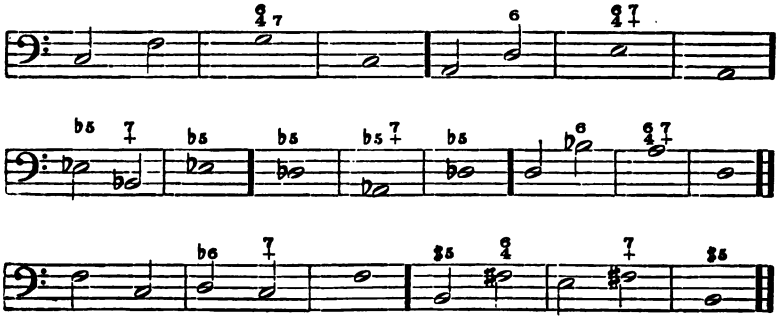
Ex. 22.



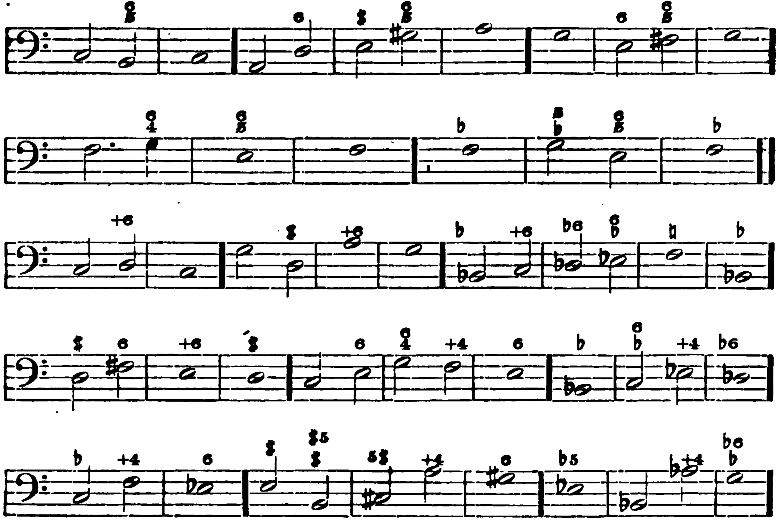
See also example 8.

EXERCISES.

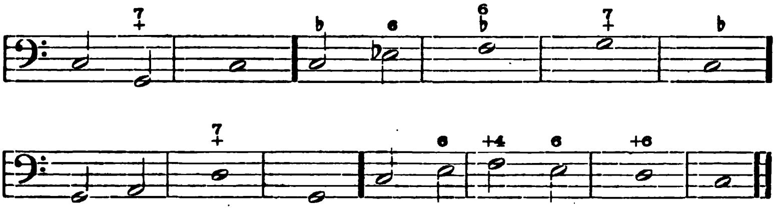
Harmonize the following fragments; first with the fifth, then with the fifth omitted in the dominant seventh chord. It will usually be best to choose a different position for each version.



Harmonize the following fragments. Employ open harmony wherever possible.



Harmonize the following fragments with the third omitted in each dominant seventh chord.



In the following exercises, each dominant seventh chord resolves regularly to its tonic, and in this way: the seventh descends diatonically downwards, according to example 3; the leading-tone either ascends to the tonic, or descends to the fifth.

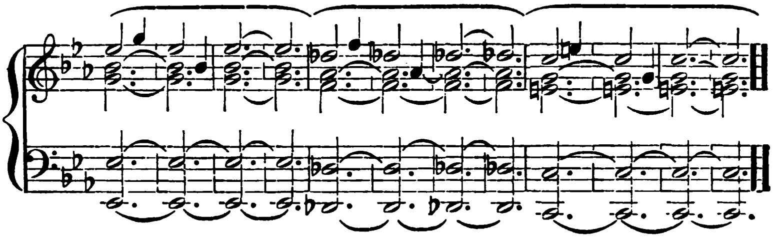
Modulations are here made to the nearest related keys only.

The student should analyze these modulations, and be prepared to name the root of each chord, as well as the different keys. It is not desirable that a figuring, showing the key and degree of the scale upon which the chords occur, shall be placed under the bass notes. It is better to realize the tonal-relationship of the harmonic successions without this aid.

SUGGESTIONS.

Follow all previous rules regarding chord-succession unless contradicted.—In moving from one phrase to the next, the rule of retaining notes common to successive chords may be disregarded.—Consecutive octaves, or consecutive fifths which result from the last chord of one phrase to the first chord of the succeeding phrase are often unobjectionable:

BEETHOVEN.

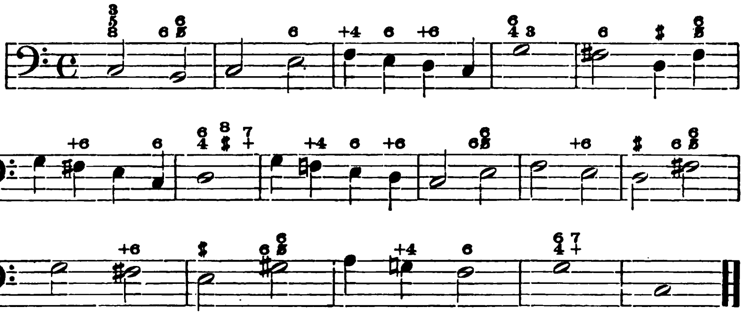


Open harmony is preferable to close; this is true of all exercises in Part II and will not be repeated.

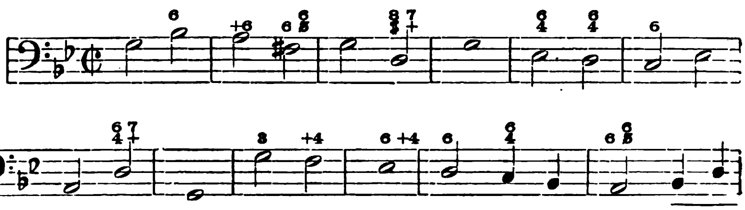
Resolve both the seventh, and the leading-tone.—A dominant seventh chord may appear complete, i.e.; with four different notes, or it may be employed with the fifth, and sometimes the third omitted.

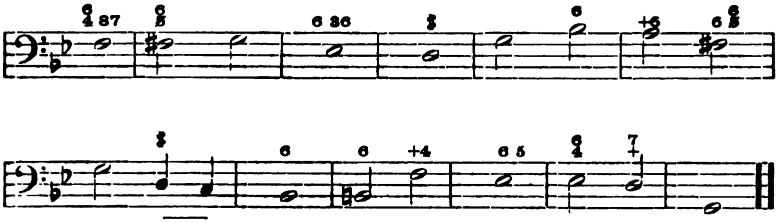
EXERCISES.

1.

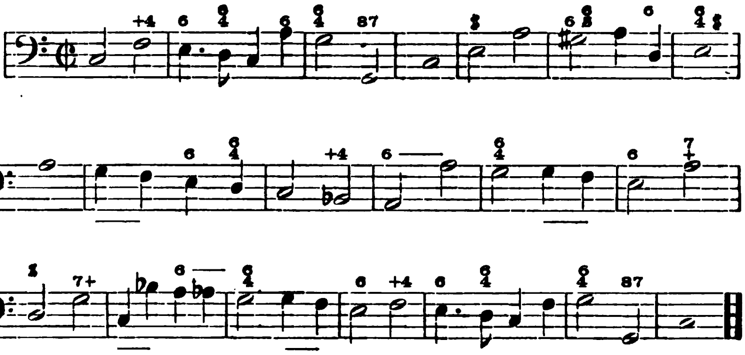


2.

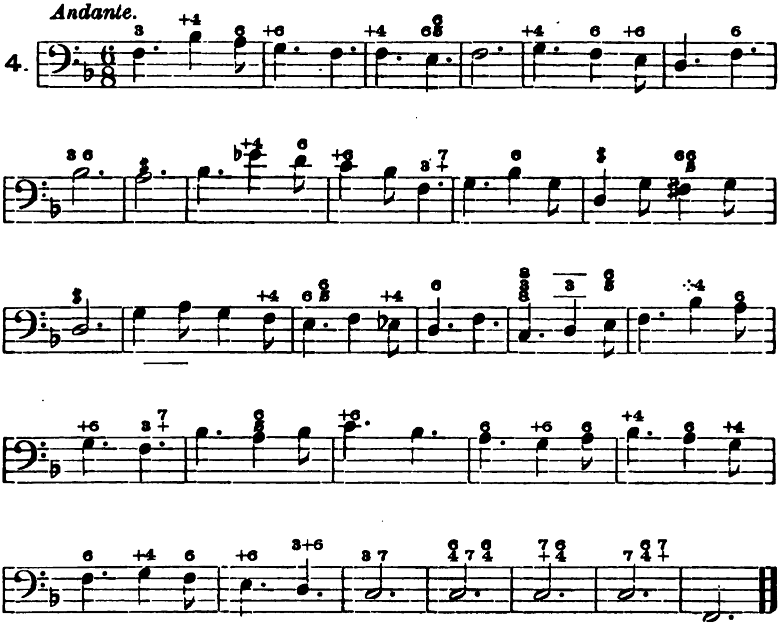




3.



4.



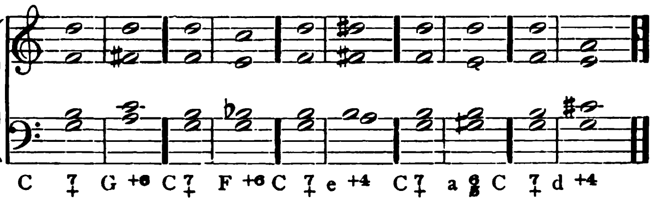
DOMINANT SEVENTH.

CONTINUED.

A dominant seventh chord may resolve to the dominant seventh of either of the five nearest-related keys. The two notes requiring resolution should conform to the rules given on page 5: i. e, the seventh, and leading-tone should either resolve regularly, remain stationary, or ascend chromatically. The leading-tone alone forms one exception; it may ascend one whole step in place of one-half step.

Moving from the dominant seventh of C to the dominant seventh of each of the keys nearest related to C.

Ex. 23.



EXERCISES.

Move from each inversion of the chord of the dominant seventh on G, to the dominant seventh chord of each of the nearest-related keys.

Make several modulations from E, to the five related keys, quitting E from any degree of the scale chosen, entering the new key on the dominant seventh chord. The seventh chord may be introduced either in root position or an inversion.

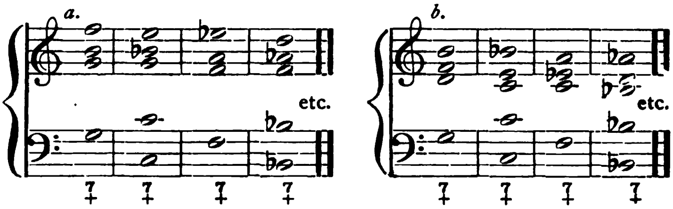
DOMINANT SEVENTH.

CONTINUED.

SEQUENCE.

In a succession of dominant seventh chords having their roots in the bass, the fifth should be omitted in alternate chords.

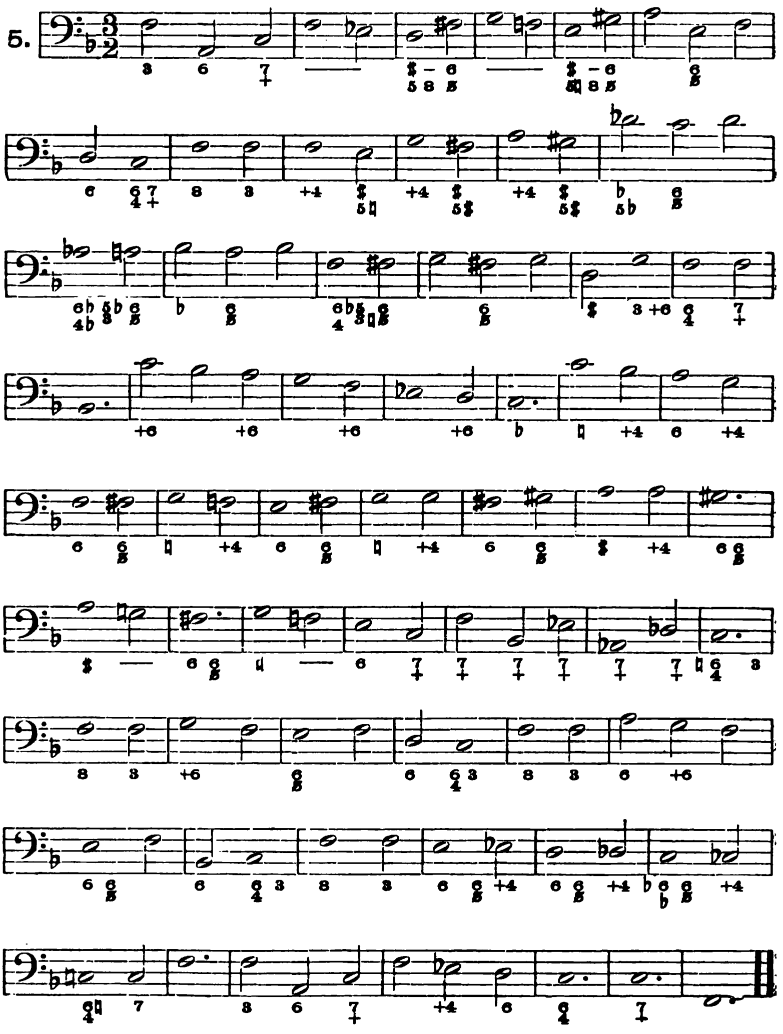
E. 24.



At *a*, Ex. 24, the fifth is omitted in the first seventh chord and in succeeding alternate chords; at *b*, the reverse is true. Whether or not the fifth shall be omitted in the first, or the second chord, will usually be determind by the position of the voices in the chord immediately preceding the first seventh chord.

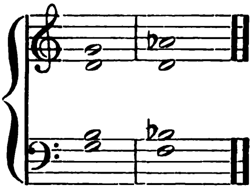
Some of the combinations in the following exercises which are notated as dominant seventh chords, are more properly altered chords. This will be understood later. They better serve the present purpose notated as dominant seventh chords.

5.



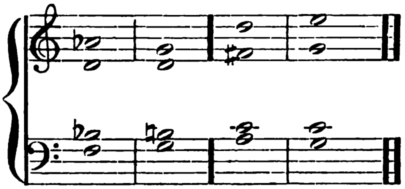
In modulations, a dominant seventh chord may enter in its second inversion without preparation of either the root or the fifth: i. e., without preparation of either one of the notes forming the dissonant fourth:

Ex. 25.



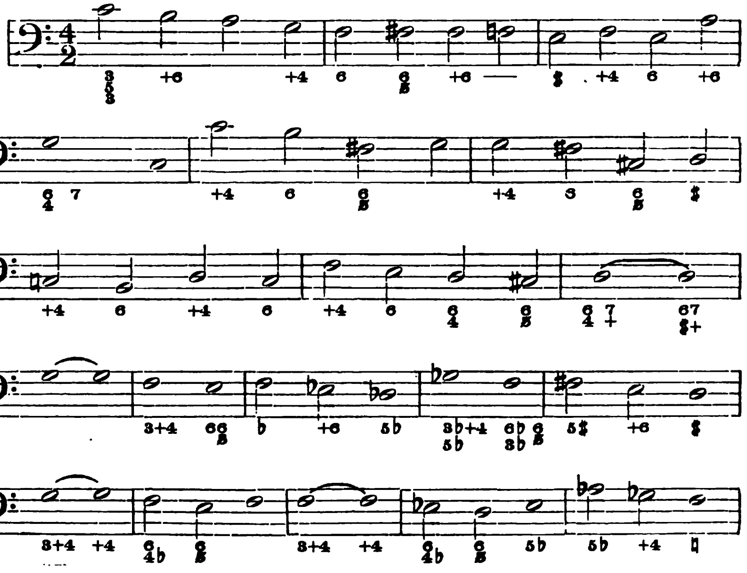
In modulations the root of a dominant seventh in its second inversion may ascend diatonically. (See Ex. 10.)

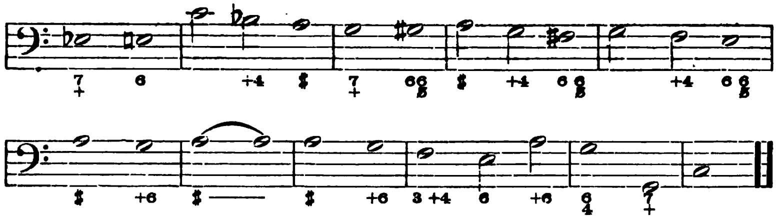
Ex. 26.



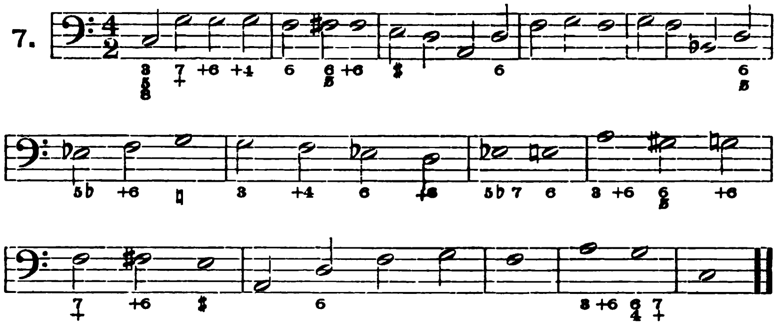
If a chord is repeated it is usually better to change its position.

6.





7.



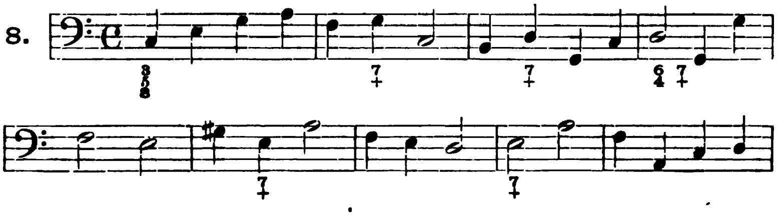
DOMINANT SEVENTH.

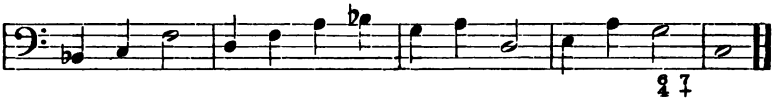
CONTINUED.

By this time the student should have gained sufficient mastery of chord-succession to be able to realize the more conventional progressions without the aid of a figured bass. In the following exercises, chords of the dominant seventh are to be introduced, as well as all other devices heretofore used: i. e., passing-notes and triads in their three positions. The harmonies should be as natural and as flowing as possible, without the introduction of seventh chords, unless they enter in an unforced manner. Each dominant seventh chord should resolve to its tonic. Modulations to the nearest-related keys only should be introduced.

Note. If the teacher desires he may indicate where the seventh chords would naturally enter. (See Ex. 8, below.) It is better not to continue these aids longer than necessary.

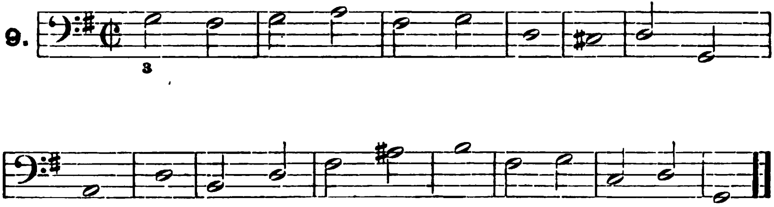
8.





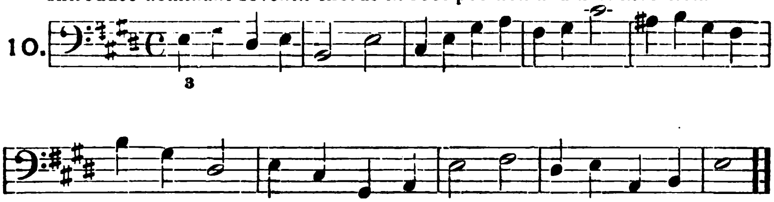
Introduce dominant seventh chords in first inversion only.

9.



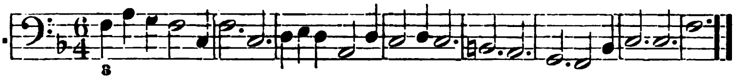
Introduce dominant seventh chords in root position and first inversion.

10.



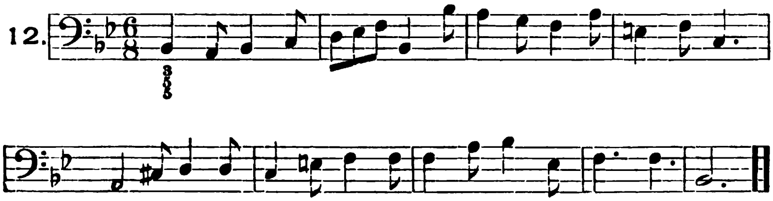
Introduce dominant seventh chords in second inversion only.

11.



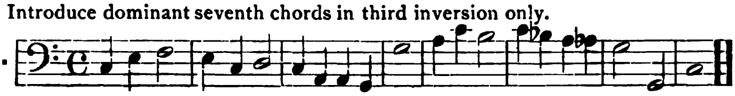
Introduce dominant seventh chords in root position, first and second inversions.

12.



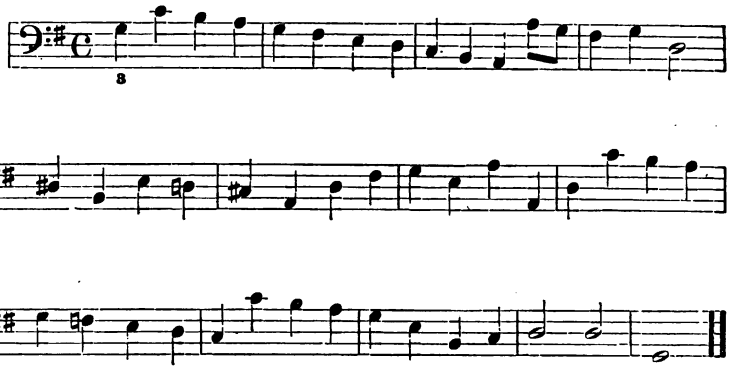
Introduce dominant seventh chords in third inversion only.

13.



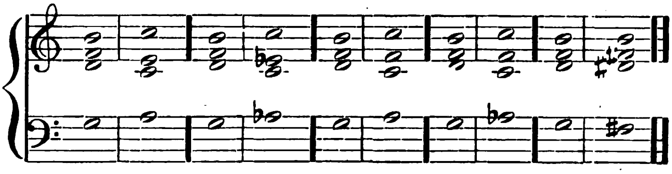
Introduce dominant seventh chords in root position and three inversions.

4.



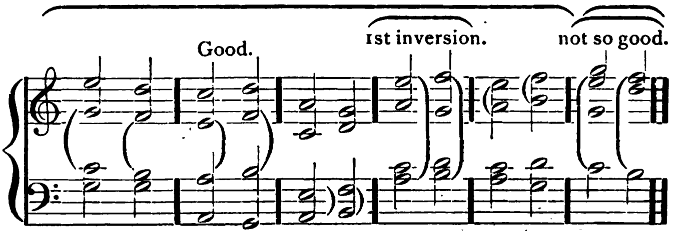
The most commonly-used irregular resolutions of the dominant seventh chord are the following: the modulations of the dominant seventh to the nearest-related keys, as explained under Ex. 23, are not included here.

Ex. 27.



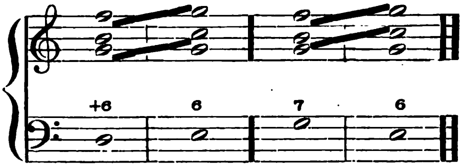
At Ex. 74, Pt. I, it was explained that consecutive fifths are permissible between inside voices if the second fifth is diminished. In dissonant chords they are permissible between any voices except the soprano and bass.

Ex. 28.



The following resolutions of the dominant seventh chord, leading to consecutive fifths with the perfect fifth following the imperfect fifth, are freely used by the best writers:

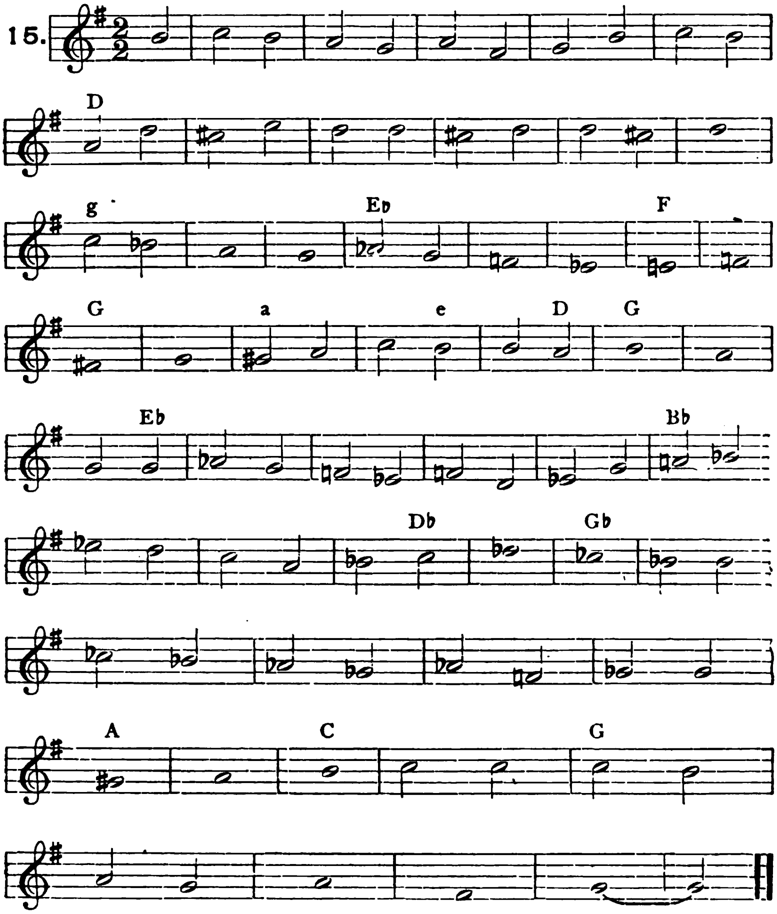
Ex. 29.



These fifths are not disagreeable because the chord resolves to a first inversion.

In the following exercise the letters signify the modulations.

15.



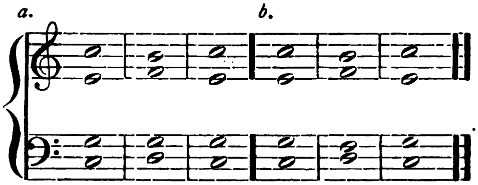
DOMINANT SEVENTH

CONCLUDED.

OMISSION OF THE ROOT.

The chord of the dominant seventh is much used without its root In the following example, the second chord at *a* is a complete dominant seventh chord; at *b* the same chord appears without its root:

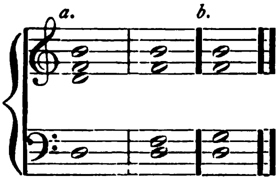
Ex.30.



The second chord at *b*, although apparently the same as a leading-tone triad, has a character radically different. In order that the student may be convinced that the second chord at *b* is really a dominant seventh chord, and not a leading-tone triad, he has only to play the sequences in Chapter IX, Pt. I, observing the effect of the leading-tone triad. Its tonal effect there is so feeble that it is accepted only on account of the symmetrical regularity of the sequence. Compare this with the chords above at *b*. In the latter the tonal effect is nearly as strong as at the complete chord at *a*.

In strict counterpoint no second inversion is allowed. This is on account of the dissonant fourth which occurs with the chord in this position, between the bass and an upper voice. In order to avoid this fourth, the root of a dominant seventh chord was omitted in music even so late as Handel's time. At this period it was written as at *a* in the following example, not as at *b*, with the root.

Ex. 31.



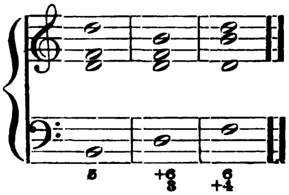
Examine, for illustration of this, either the "Messiah," or the Bach Chorales. The use of the dominant seventh chord in its second inversion with the root, is one of the characteristics of the modern style.

From all that has been written above, it should be understood that whenever a chord appears which is apparently a leading-tone triad, it should be classed as a dominant seventh chord. The leading-tone triad is admissible only in sequence.

As to the triad formed on the second degree of the minor scale, the exercises in the minor mode in which this chord constantly appears in Pt. I shows that its tonal character is quite different from the chord of the dominant seventh without its root.

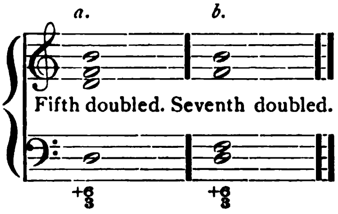
The figuring for the dominant seventh chord without root is as follows:

Ex. 32.



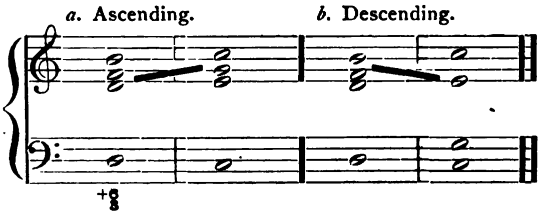
Whenever a dominant seventh chord without root stands in its second inversion, either the bass note — the fifth of the real chord — or the seventh may be doubled:

Ex. 33.



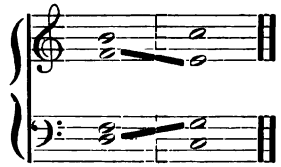
If the fifth be doubled, the seventh of the chord may either ascend or descend:

Ex. 34.

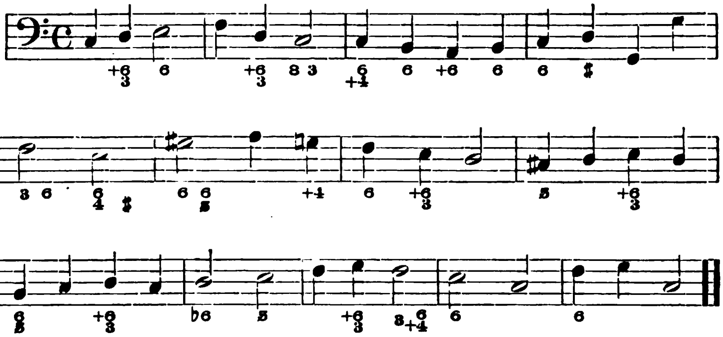


If the seventh be doubled, one of the sevenths should ascend, the other should descend:

Ex. 35.



1.

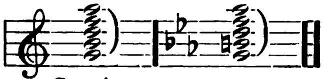


In instrumental music a dominant seventh chord may resolve in another octave. The rule for such progressions is that there shall be natural connection between the chords.

CHAPTER II.

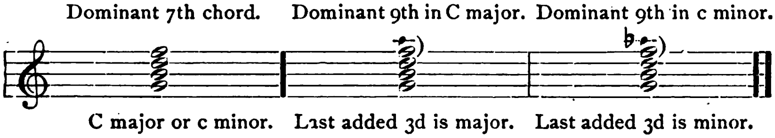
THE CHORD OF THE DOMINANT NINTH.

The chord of the dominant ninth is formed by adding another third to a dominant seventh chord. There are two kinds of ninth chords, major and minor; if the added third is major, the chord is a major ninth; if the added third is minor, the chord is a minor ninth:



It will be seen from the above example that a dominant ninth chord is an extension of a dominant seventh chord. It must always include a seventh, and, like the seventh, it needs no preparation. It has the same harmonic tendencies, same resolutions, and same general characteristics as the chord of the dominant seventh.

Note. The chords of the dominant ninth are the most complete chords in our harmonic system. The dominant seventh chord, when heard alone, determines a tonality only, while the ninth chord determines both tonality and the mode, for example: a dominant seventh chord on G may be either in C major or c minor, while the ninth chord is definitely in major or minor according to the last added third:



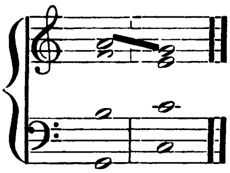
THE MAJOR NINTH.

This chord derives its name from the interval found between the extreme notes when arranged as a series of thirds.

It will be seen that there are five notes in a complete ninth chord. As we write for four voices only unless otherwise indicated, one of these notes must be omitted. The fifth is the note which adds the least to any chord, and is the one which may best be omitted.

The major ninth chord, like all chords founded on a dominant, naturally resolves to its tonic. The dissonance of the ninth, like the seventh, most naturally resolves downward:

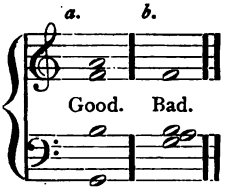
Ex. 36.



Neither of the two dissonant notes — the seventh or the ninth — need be prepared. If, however, they appear in the preceding chord, it is usually best to retain them in the same voices.

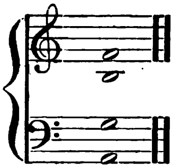
The disposition of the ninth and the third requires special consideration; they are subject for their best effect to the following restrictions: The ninth should always appear *above* the root, and should be separated at *least* a ninth from it:

Ex. 37.



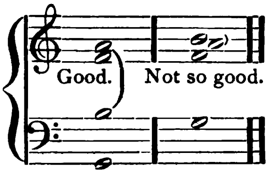
At *a*, in preceding example, the disposition of the voices gives a chord at once harmonious and pleasing. At *b*, the same chord with the ninth separated but a second from the root, gives a harsh, disagreeable effect. In the succeeding example, the chord is also hard and disagreeable, because the ninth is *under* the root:

Ex. 38.



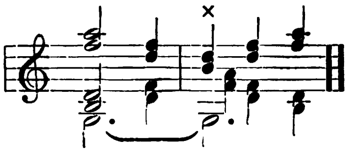
The third of a ninth chord, which is always a leading-tone, should appear *under* the ninth, and should be separated at least a seventh from it:

Ex. 39.



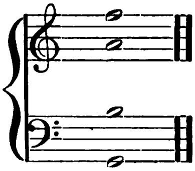
These conditions regarding the ninth and the third, are indispensable for the best effects of the major ninth chord.

Modern composers often place the ninth below the third, and in such a way that these two notes form the interval of a second, but this disposition is rarely used unless the chord has first been heard in its normal position; i. e. with the ninth above the third:



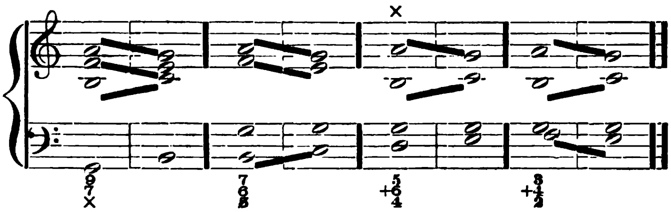
As a general rule, the ninth is most effective when placed in the soprano voice; but it produces a good effect when placed *under* the seventh:

Ex. 40.



The major ninth chord, like triads and seventh chords, may be inverted. The figuring for this chord in its root position and inversions is as follows:

Ex. 41.



The second inversion, marked × in example 41, is little used.

The fourth inversion is impossible, when the root is included, as the ninth would then be *under* the root and the third *above* the ninth. See examples 37, 38 and 39.

The figuring of this chord is at first somewhat confusing; but if the student will concentrate his mind long enough to understand why certain figures, and not others, are used, he will have no difficulty in at once recognizing the chord called for. As has already been explained, the cross always indicates a dominant seventh chord. $\substack{7\\+}$ signifies a dominant seventh chord with its root in the bass. $\substack{9\\7\\+}$ signifies a dominant ninth chord with its root in the bass.—$\substack{6\\5}$ signifies a dominant seventh chord with its third in the bass. $\substack{7\\6\\5}$ signifies a dominant ninth chord with its third in the bass.—+6 signifies a dominant seventh chord with its fifth in the bass. $+\substack{5\\6\\4}$ signifies a dominant ninth chord with its fifth in the bass.—$+\substack{4\\2}$ signifies a dominant seventh chord with its seventh in the bass. $+\substack{3\\4\\2}$ signifies a dominant ninth chord with its seventh in the bass.

If the student will carefully examine this figuring for the ninth chord, he will notice that the same figuring used for the seventh chord and its inversions is included in the figuring for the ninth chord and its inversions.

Briefly, the figuring for the dominant ninth chord in its different positions is as follows:

$\substack{9\\7\\+}$ signifies a chord of the dominant ninth with its root in the bass;

$\substack{7\\6\\5}$ signifies a chord of the dominant ninth with its third in the bass;

$+\substack{5\\6\\4}$ signifies a chord of the dominant ninth with its fifth in the bass;

$+\substack{3\\4\\2}$ signifies a chord of the dominant ninth with its seventh in the bass.

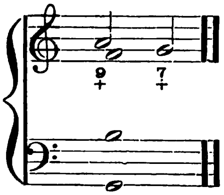
The ninth with its root in the bass is usually figured thus: $\substack{9\\+}$.

The natural resolution of the ninth chord is the same as the dominant seventh chord, to its tonic. The chord contains three notes which need a careful resolution; these are the ninth, the seventh and the leading-tone. The ninth and the seventh will naturally descend, and the leading-tone ascend.

The dominant ninth in the key of C, in its root position, inversions, and regular resolutions, are as given in example 41.

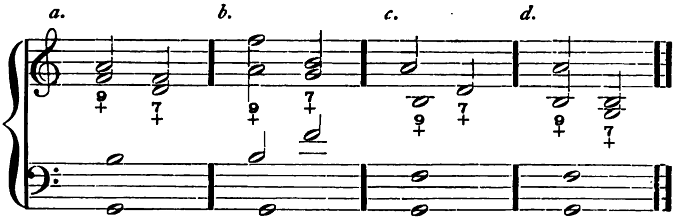
Observe that in this example the seventh, the ninth, and the leading-tone, resolve regularly, even though the third has to be doubled.—The ninth often resolves before the other notes of the chord. This is classed among the regular resolutions of the ninth chord:

Ex. 42.



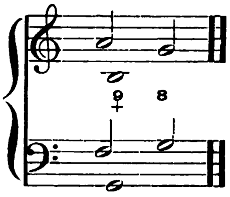
The ninth is sometimes transformed into a seventh chord without changing its fundamental. In such a case the ninth may descend to any interval of the seventh chord:

Ex. 43.



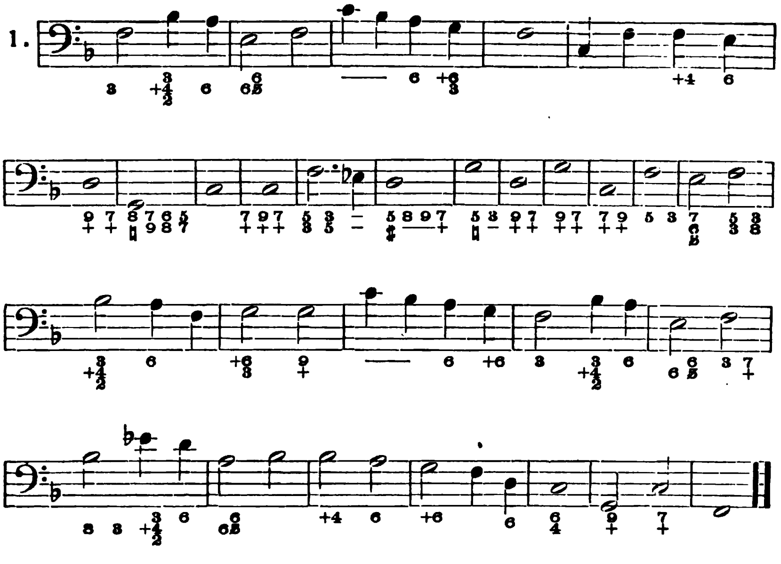
Like the seventh, the ninth chord is sometimes transformed into a consonant triad:

Ex. 44.

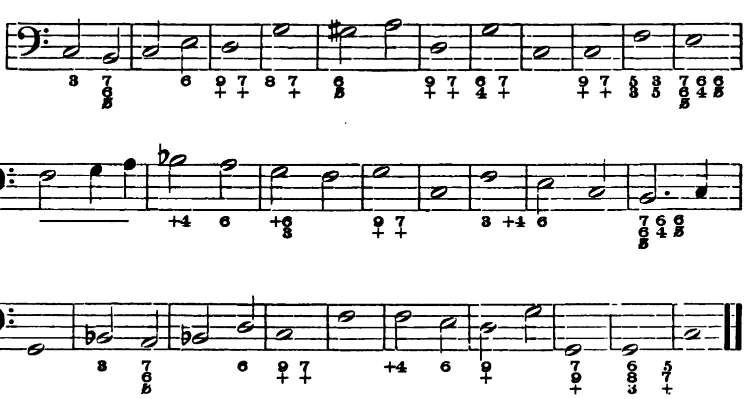


EXERCISES.

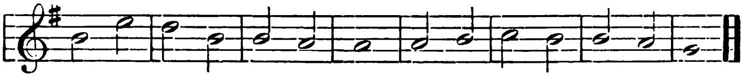
1.



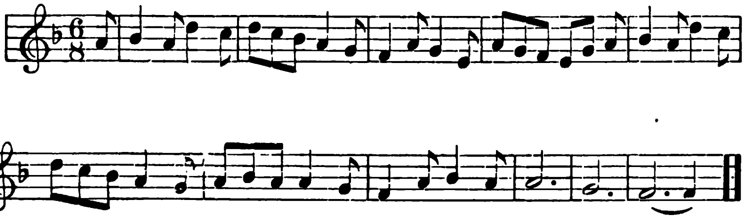
2.



3.



4.



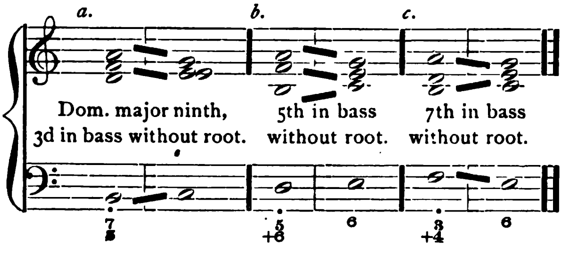
THE MAJOR NINTH.

CONCLUDED.

OMISSION OF THE ROOT.

Like the chord of the dominant seventh, the chord of the major ninth is much employed without its root. The figuring is as follows:

Ex. 45.

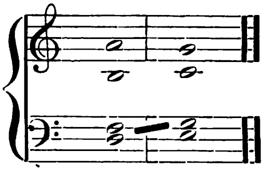

a.
b.
c.
Dom. major ninth, 3d in bass without root.
5th in bass without root.
7th in bass without root.

The real root or generator of each of the chords in example 45 is G, the fifth of the scale. The student may prove this by first striking the chords as written in whole notes, then afterwards adding the G underneath, represented by the dot. The entrance of this G will in no way give the feeling of a new element; it only emphasizes or makes clear a tone which the musical conciousness demands.

The entrance of the major ninth chord without the root is subject to the same rules regarding the third and ninth as explained under example 39; i. e. the ninth should appear above the third.

In the chord of the ninth without the root with the fifth in the bass, the seventh of the chord often ascends:

Ex. 46.



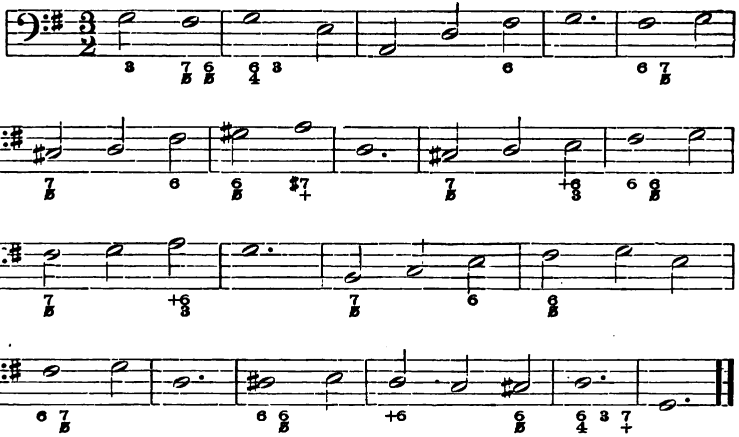
This progression is often made in order to avoid the doubling of the third, as at *b*, example 45. This rising of the seventh in the major ninth chord without root, is analogous to the rising of the seventh in the dominant seventh chord without root. See example 34 in preceding chapter.

EXERCISES.

CHORDS OF THE MAJOR NINTH WITHOUT ROOT.

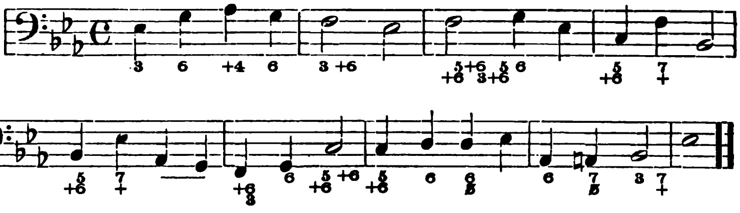
First inversion $\substack{7\\5}$.

1.



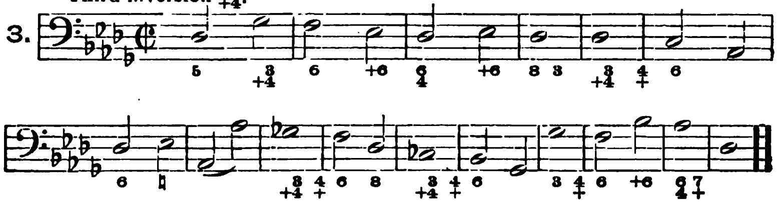
Second inversion. $^{5}_{+6}$

2.



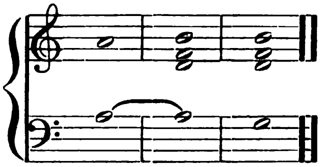
Third inversion $^{3}_{+4}$.

3.



Chords like the following are often found:

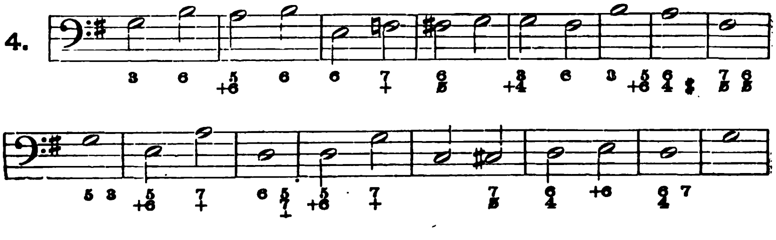
Ex. 47.

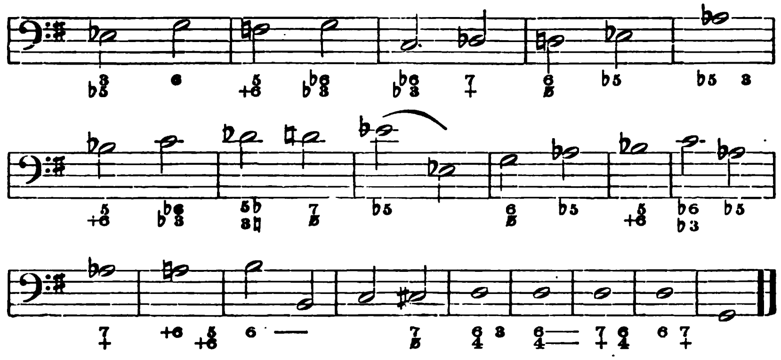


This is classed by a few theorists as a chord of the dominant major ninth, without root, with the ninth in the bass. As the bass note in a chord like the preceding is nearly always prepared, it seems best to class this chord either as a secondary seventh chord or as a suspension. (This will be explained in the succeeding chapters.) The general rule will then hold good that neither one of the dissonant notes in either the dominant seventh chord or the dominant ninth chord need be prepared. This chord will not be employed until used as either a secondary seventh or as a suspension.

Containing the three inversions.

4.



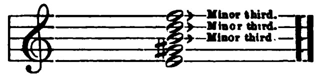


THE CHORD OF THE MINOR NINTH.

In the chord of the minor ninth, the ninth should be above the root, the same as in the chord of the major ninth, but the third may be either above or below the ninth. In this chord, each third after the *first* third above the root has been added, is a minor third. From this it will be understood that the third, fifth, seventh, and ninth are separated by an equal distance, i. e. by the interval of a minor third:

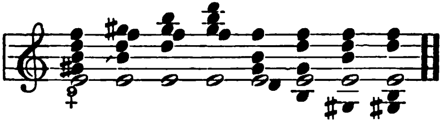
MINOR NINTH IN A.

Ex. 48.



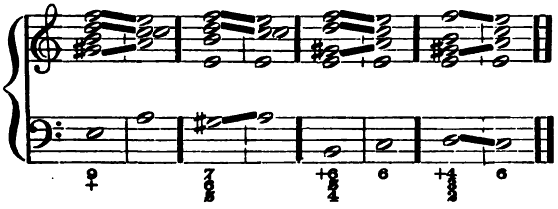
These four upper voices, then, being equally distant one from the other, may be placed in any position, provided the ninth and root are separated by at least the interval of a ninth:

Ex. 49.



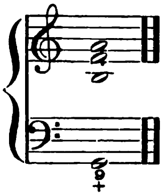
The figuring for the chord of the minor ninth, with root, is as follows:

Ex. 50.



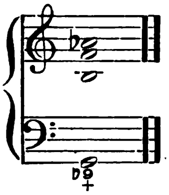
It will be noticed that some of the positions of the minor ninth chord are figured the same as the corresponding positions of the major ninth chord. Whenever there is doubt as to which chord is intended, the ninth should be added according to the scale in which the exercise is written. If it is necessary to change the ninth in order to give the desired interval, this will be designated by a corresponding chromatic sign placed before the figure under the bass note. If, for example, the signs $\substack{9\\+}$ were placed under a G, in the key of C, the ninth should be written thus:

Ex. 51.



If the ninth is to be minor, it would be necessary to place a flat before the figure 9:

Ex. 52.



All ninths, then, should be written according to the key signature unless contradicted by a chromatic sign.

The entrance, and regular resolution of the minor ninth chord is the same as the major ninth chord.

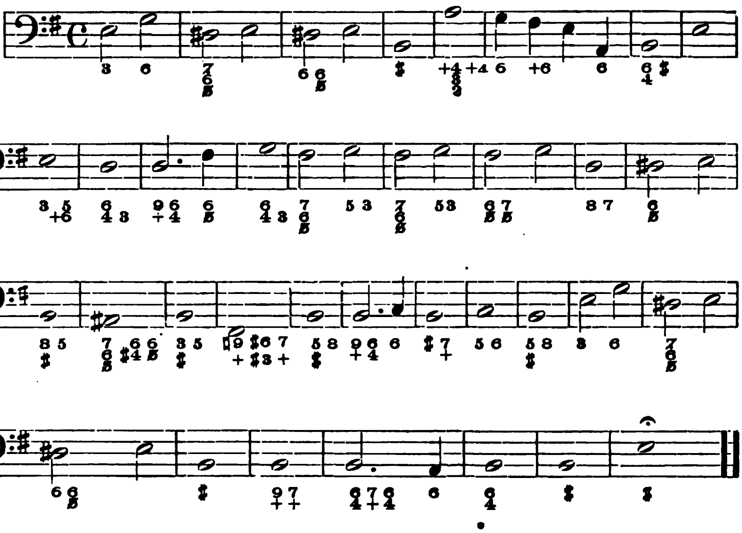
The minor ninth chord with root is not so much used as is the major ninth chord with root. It is more or less harsh, especially in some of its inversions.

As the general treatment of the minor ninth chord with root is the same as the major ninth with root, no special exercises will be given for the minor ninth. In the following exercises both the major ninth and the minor ninth are employed.

EXERCISES.

MAJOR AND MINOR NINTH CHORDS.

1.



CHORD OF THE NINTH.

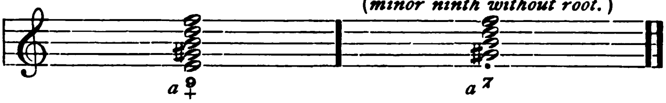
CONCLUDED.

The chord of the minor ninth without root is much employed, and its irregular resolutions are so numerous that it furnishes one of the best means for modulation.

When the chord of the minor ninth is used without its root, it takes the name of the

CHORD OF THE DIMINISHED SEVENTH.

Ex. 53.



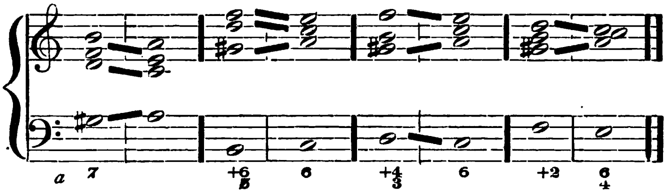
Complete minor ninth chord. Diminished seventh chord. (*minor ninth without root.*)

Attention is once more called to the fact that the chord of the diminished seventh is composed of a succession of minor thirds. As these intervals are equally distant one from the other, any inversion is possible. Its regular resolution is the same as the minor ninth chord *with* the root, i. e. to its tonic. It is figured as follows:

CHORD OF THE MINOR NINTH WITHOUT ROOT.

Chord of the diminished seventh.

Ex. 54.

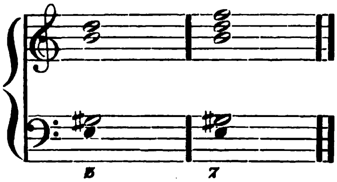


The student should bear in mind that these chords are not seventh chords, but really ninth chords in which *three* notes require resolution.

It is also important to realize the affinity existing between the chord of the dominant seventh without root (see examples 30 to 35 inclusive, in preceding chapter), and the chord of the minor ninth without root. The dominant seventh chord without root gives a diminished *triad*; the minor ninth chord without root gives a diminished *seventh* chord:

Diminished triad. Diminished seventh.

Ex. 55.

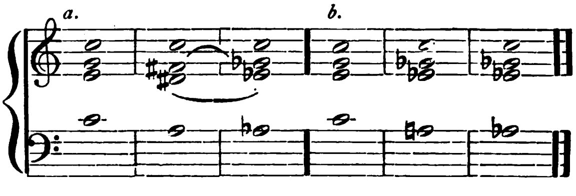


The root of each of these chords is E, the dominant of the key of a.

A diminished seventh chord, which, played on a piano, or organ, would sound the same, may be notated enharmonically in different ways. The chromatic signs would be determined either by the key one is in or by the key to which one wishes to pass. It was explained in Pt. I (Chapter X, examples 147 to 149 inclusive), that it is usually better to choose chromatic signs which are nearest in tonal-relationship. It is best, however, not to introduce signs for the sake of a correct notation which may embarrass a player or cause false intonation:

Correct. Better.

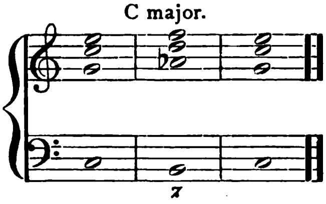
Ex. 56.



The second chord at *a* is more correctly notated because it is in a key — e — more nearly-related to C than is the second chord at *b* — key of b♭. For practical puposes, either for playing or singing, it is better as notated at *b*.

In a major mode, a diminished seventh chord may be introduced and without in any way causing a feeling of modulation, or change of mode:

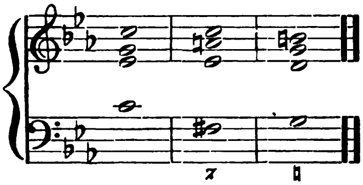
Ex. 57.



When in a minor mode, however, the major ninth cannot be introduced without giving a strong feeling of change of mode. The major mode is the more authoritative.

The following succession, in which the root of the diminished seventh chord is *the dominant of the dominant*, resolving to the dominant of the original key, is very common:

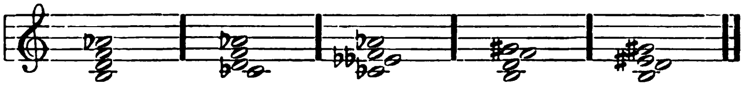
Ex. 58.



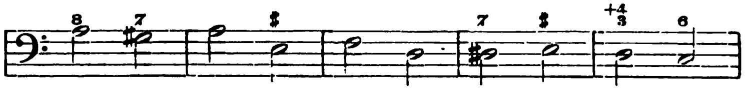
EXERCISES.

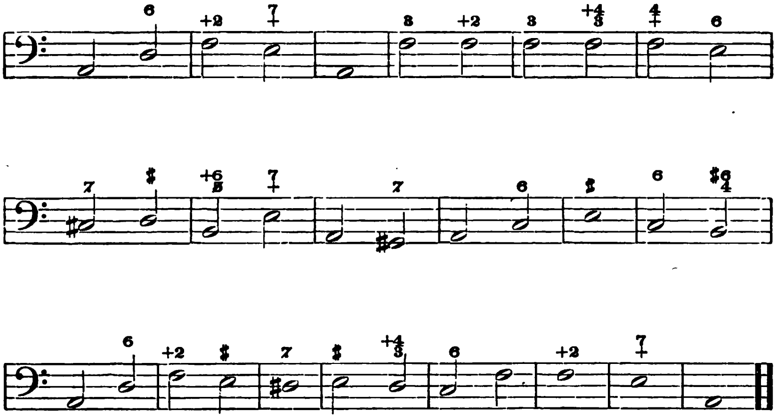
Figure, and resolve each of the following diminished seventh chords to its tonic. Remember that this chord is a minor ninth without root. To find the root, arrange the notes in a series of thirds; the root will always be a major third below the lowest note when the chord is so arranged.

1.

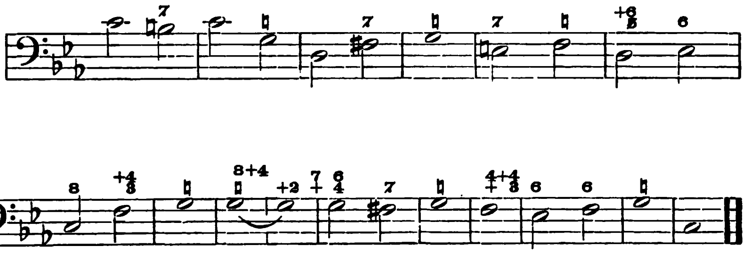


2.

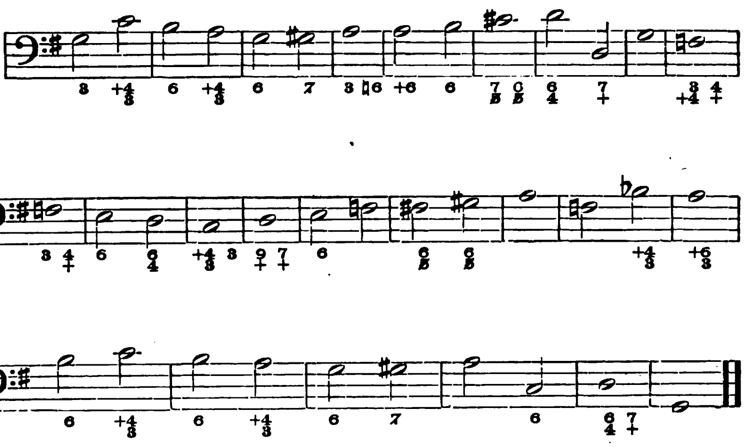




3.



4.



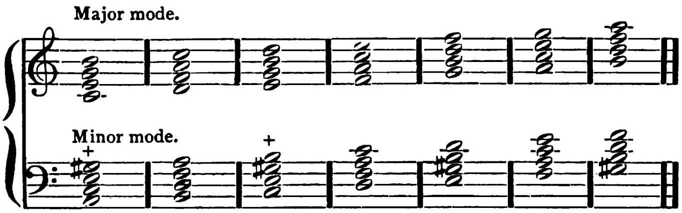
CHAPTER III.

SECONDARY SEVENTH CHORDS.

A seventh chord founded on any degree of the scale other than the dominant is called a secondary seventh.

If a seventh chord were to be built on each degree of the scale in the two modes, there would result seven different orders:

Ex. 59.



Of the preceding chords only four are treated as independent seventh chords. Those marked with a cross, in the minor mode, are not admitted as independent chords. We have already seen that the one on the seventh degree of the minor mode is derived from the chord of the minor ninth. The other two chords are by no means excluded from harmony, but neither one of them ever has the character of a seventh chord as they appear in the example. Their origin is different and will be discussed later.

In examining the intervals which form the secondary sevenths in Ex. 59, we shall find that those formed on the 2d, the 3d, and the 6th degrees of the major mode, and on the 4th degree of the minor mode are the same. This chord is composed of a minor triad with the addition of a minor seventh. It is called the seventh of the second order.

The seventh of the third order is composed of a diminished triad with the addition of a minor seventh. It is found on the 7th degree of the major mode and on the 2d degree of the minor mode.

SECONDARY SEVENTHS.

CONTINUED.

SEVENTHS OF THE SECOND AND OF THE THIRD ORDER.

The chord of the seventh of the 2d order is used almost exclusively on the second degree of the major mode. The chord of the seventh of the 3d order is used almost exclusively on the second degree of the minor mode. (We have already seen that the chord of the seventh formed on the leading-tone of the major mode is not an independent chord, but really a part of the major ninth chord; it is admissible as an independent chord, in sequence only. That which is true of a triad on the leading-tone — see page 23, first paragraph — is true of a seventh on a leading tone; i.e. the dominant is the real generator.)

As the seventh of the second order is used mostly on the second degree of the major scale, and the seventh of the third order on the second degree of the minor scale, we shall study them simultaneously. The seventh of the second order is to the major mode what the seventh of the third order is to the minor mode.

Secondary sevenths should be prepared. They resolve regularly, like the dominant seventh chord, to the chord a fourth above (or a fifth below) the root of the seventh chord. See example 20, page 10.

The secondary seventh chords are figured as follows:

7 signifies a seventh with root in the bass.
$\substack{6\\5}$ signifies a seventh with third in the bass.
$\substack{4\\3}$ signifies a seventh with fifth in the bass.
2 or $\substack{6\\4\\2}$ signifies a seventh with seventh in the bass.

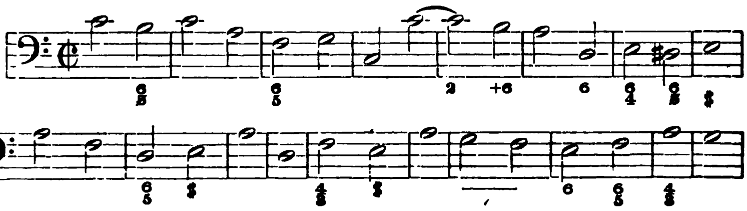
They are notated according to the scale signature unless contradicted by a chromatic sign.

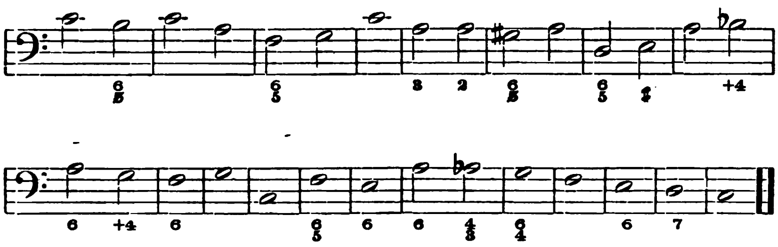
Whenever figures are found which are not included in the above table, write the interval demanded by the figure, reckoning from the bass note.

The subjoined exercises include the principal irregular resolutions.

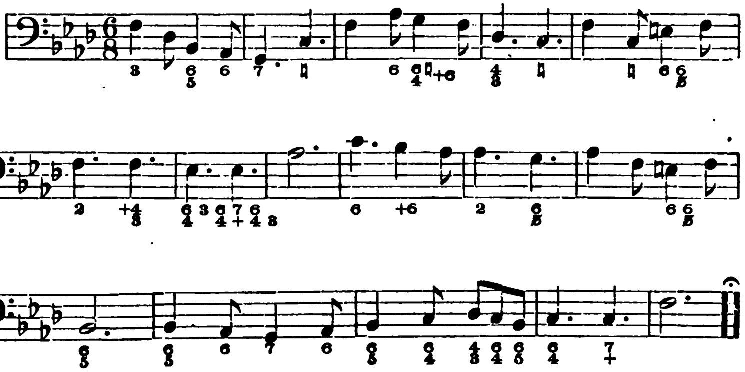
EXERCISES.

1.



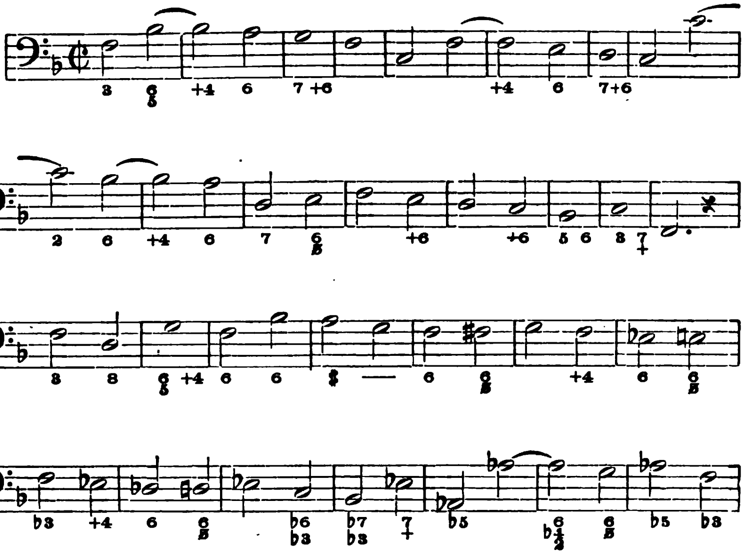


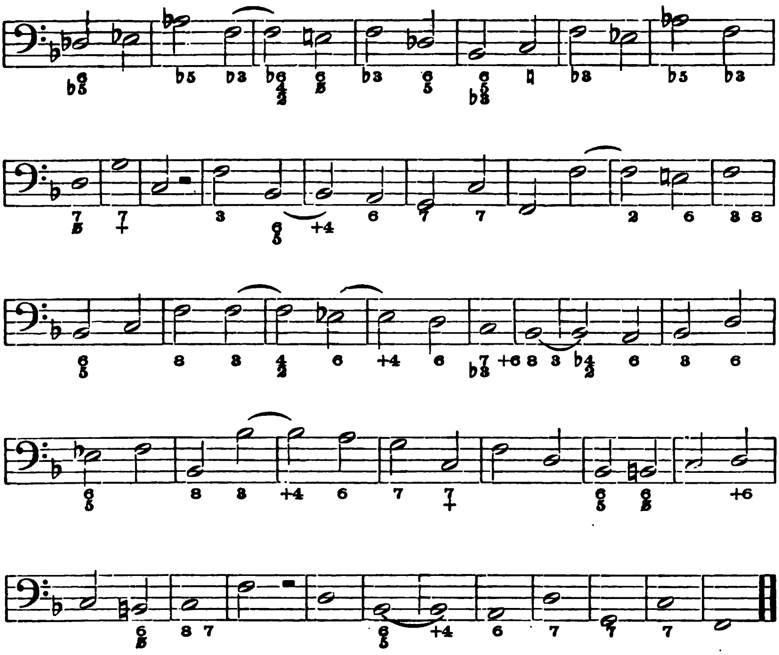
2.



Alexandre Guilmant.

3.

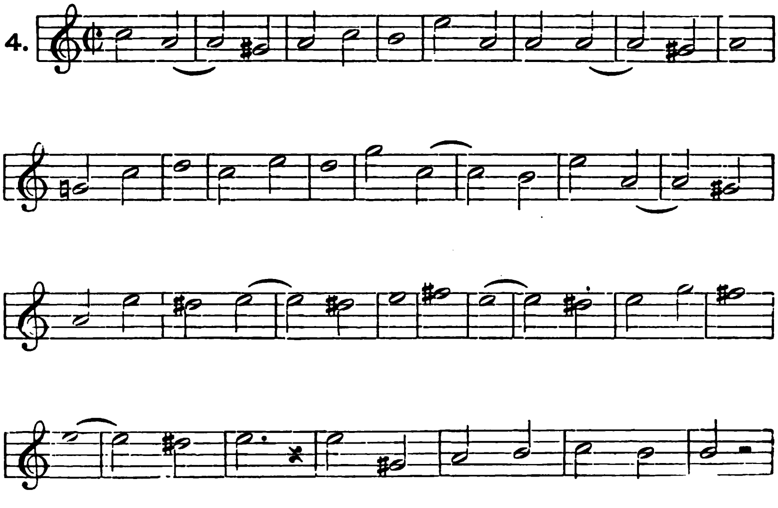


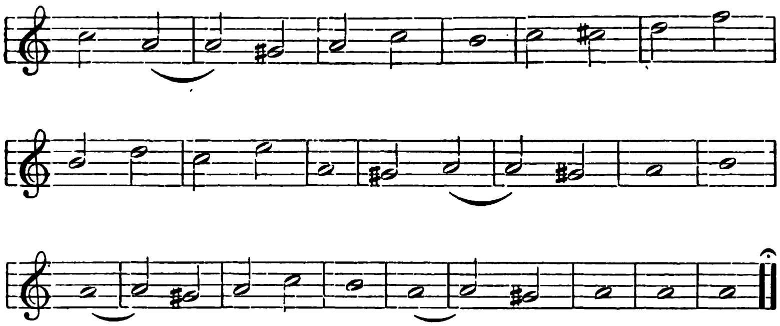


MELODY.

Alexandre Guilmant.

4.





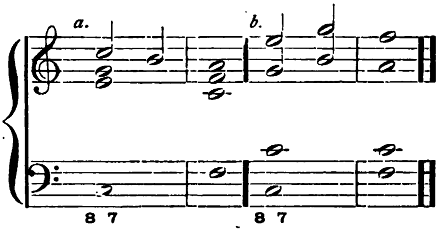
SECONDARY SEVENTHS.

CONCLUDED.

SEVENTHS OF THE FOURTH ORDER.

The seventh of the fourth order is composed of a major triad and a major seventh. It is found on the 1st and 4th degrees of the major mode, and on the 6th degree of the minor mode. It is the most dissonant of all the seventh chords, and for this reason needs more careful preparation. When a seventh is added to a triad, like the following:

Ex. 54.

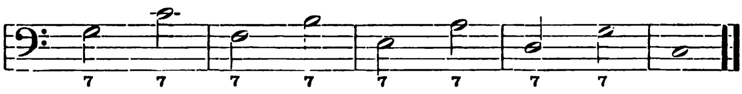


i. e. when the root is the same for the triad and the seventh chord, the seventh need not be prepared.

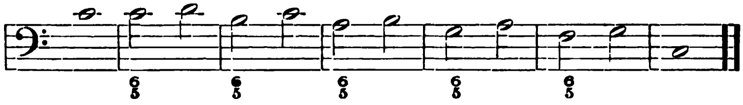
EXERCISES.

SEQUENCES ON THE FOUR ORDERS OF SEVENTH CHORDS.

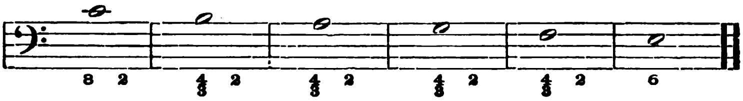
1.



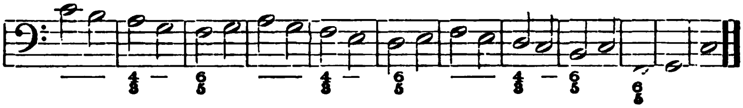
2.



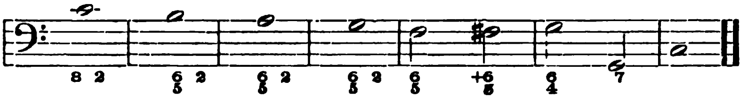
3.



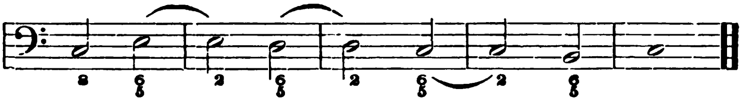
4.



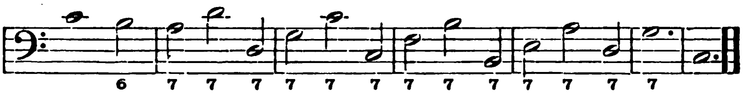
5.



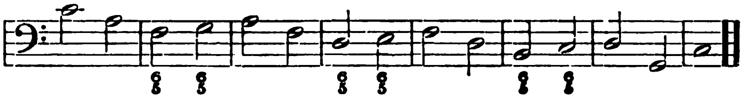
6.



7.

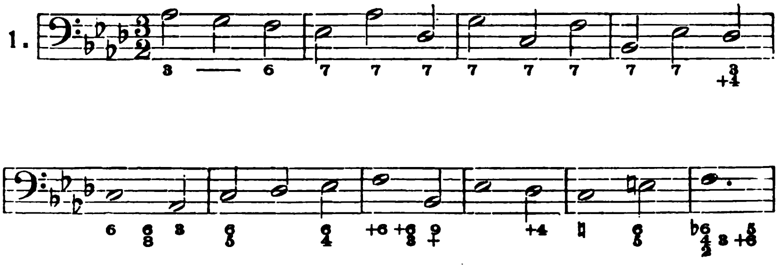


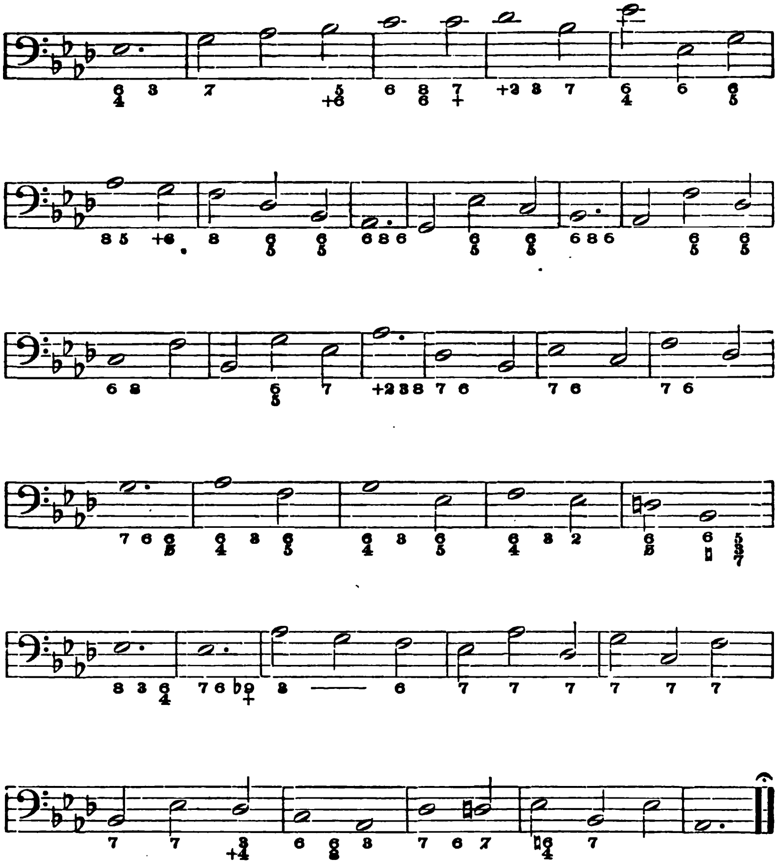
8.



EXERCISES.

1.



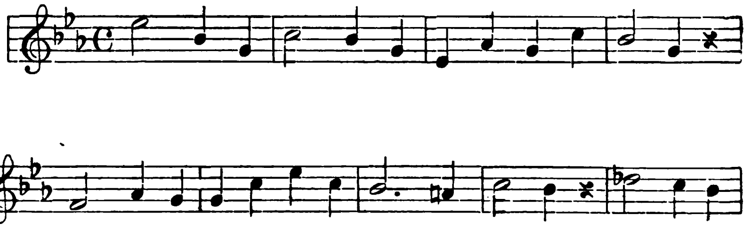


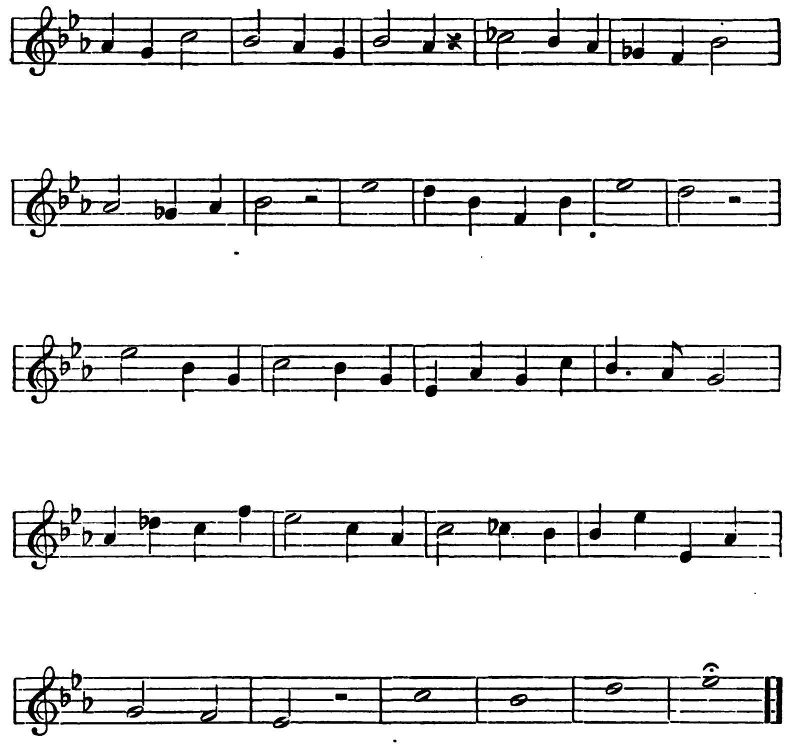
MELODY.

(MAJOR AND MINOR NINTHS.)

ALEXANDRE GUILMANT.

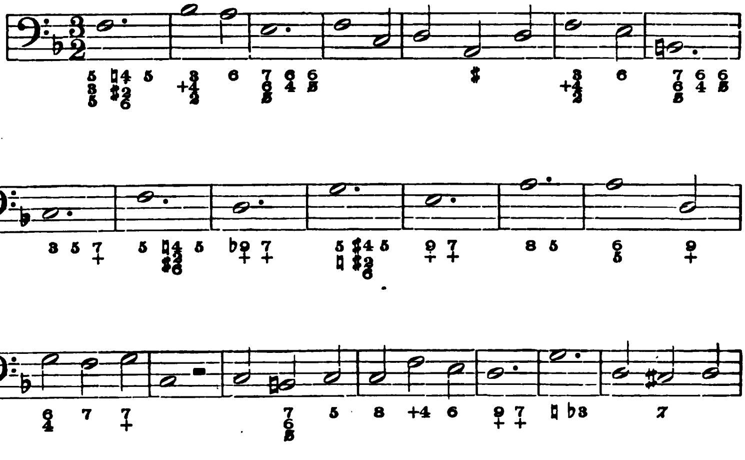
2.

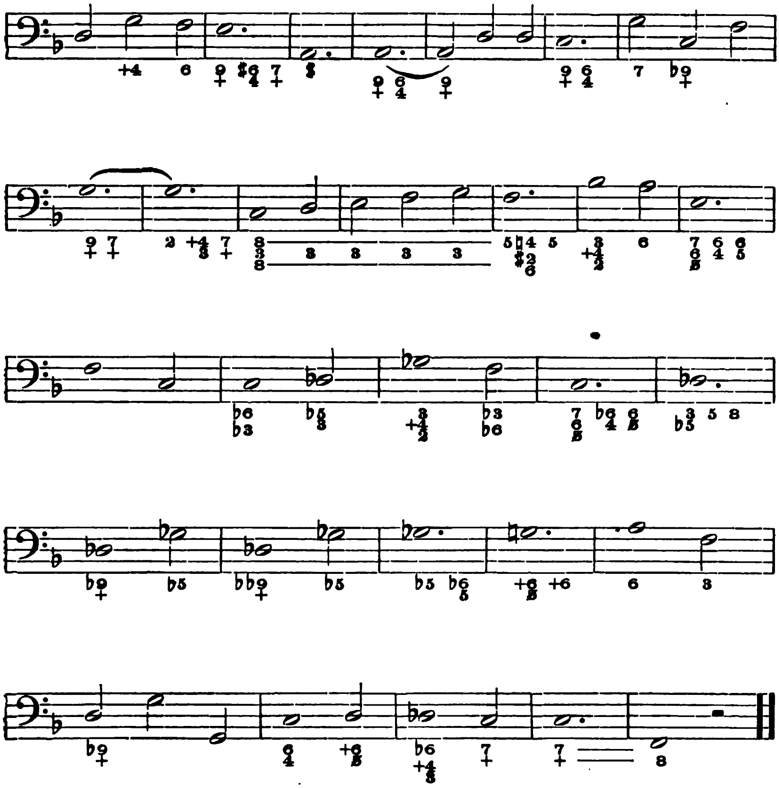




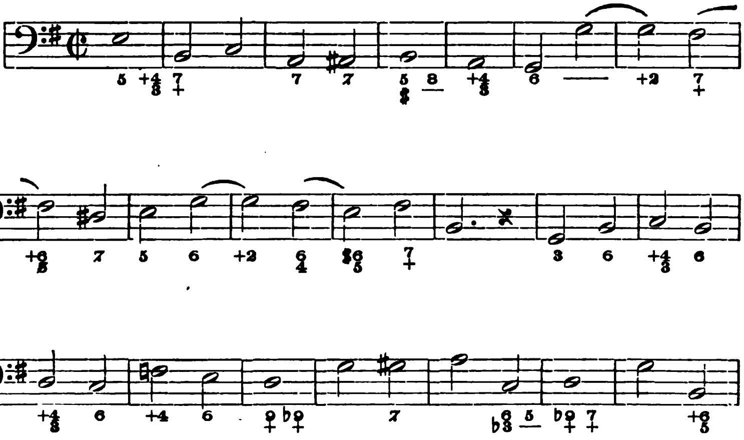
Alexandre Guilmant.

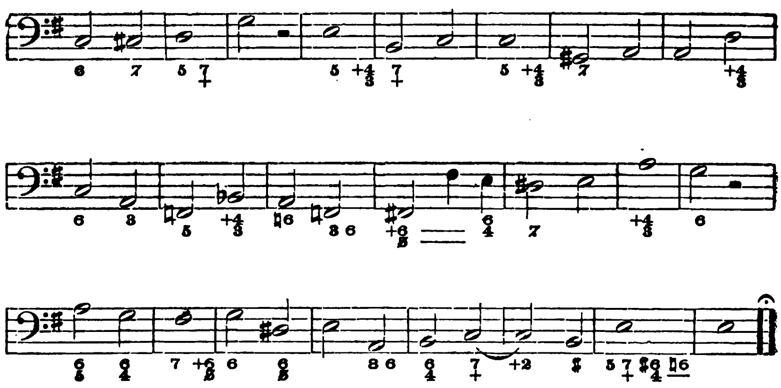
3.





4.





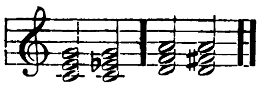
CHAPTER IV.

THE ALTERED CHORDS.

In the French school, the term *altered chord*, is applied only to chords whose third is major, and whose fifth, perfect in the construction of the scale, is either chromatically raised, or chromatically lowered. *All* chords then, having a major third, i. e., either triads, sevenths, or ninths, with the fifth chromatically raised or chromatically lowered, are altered chords.

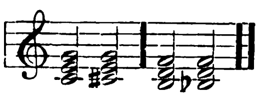
Chords like the following, in which the third is raised or lowered, thus changing the triad from major to minor, or vice versa:

Ex. 61.



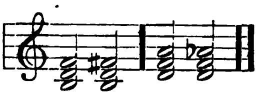
or those transformed into a diminished, or vice versa:

Ex. 62



or the diminished into a minor, or vice versa:

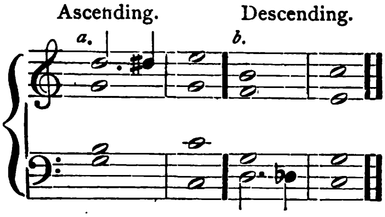
Ex. 63.



are not altered chords; all such transformations are called changes of form.

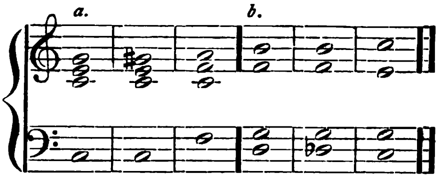
An alteration may be either melodic and of short duration:

Ex. 64.



or harmonic:

Ex. 65.



Some alterations may be analyzed as either melodic or harmonic. In the majority of cases the melodic alteration is of shorter duration than the harmonic, and it usually occurs on the unaccented part of the measure.

Chromatic alterations of notes of a chord other than the fifth may occur in different voices at the same time; they have more the character of passing-notes.

This alteration of the fifth introduces us to a new category of chords, different from those formed by the natural notes of the scale. They play an important part in modern music and are now as familiar to the average concert-goer as is the dominant seventh chord, or the ninth chords.

They have been treated by different theorists in various ways, more or less confusing, and usually in such a manner that the student is utterly at loss to distinguish one from the other, either when hearing them, or when he tries to analyze a score.

The French system of notating the altered chord is coming to be generally accepted by musicians, both in America and England, as the simplest, the clearest; it leaves no confusion in analysis and conforms most nearly to the methods employed by the great composers. The terms "German Sixth," "French Sixtn," and "Italian Sixth," are confusing, useless, and misleading. They are confusing because they make three chords out of one; they are useless and misleading for the same reason. These chords are but different versions or aspects of one and the same chord — the dominant.

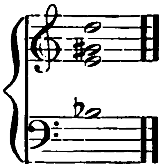
We bespeak for the remainder of this chapter the most careful attention. It contains the most important matter thus far treated, and differs most from many text-books now in popular use.

ALTERED CHORDS.

CONTINUED.

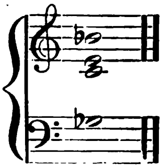
At first sight some of the altered chords appear difficult of analysis. If, for example, an altered chord contains several chromatic signs the student may at first be in doubt as to which one forms the alteration. In all such cases he has only to find the root of the chord and bear in mind the rule that in all altered chords the *third* must be *major*, and that the *fifth*, perfect in the construction of the scale, is either raised, or lowered. The following example:

Ex. 66.



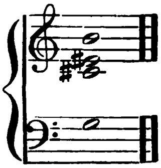
is an altered dominant seventh on E. The G♯ is not an altered note; it is necessary for the correct formation of a major chord on E. It is the B♭, the fifth of the chord, which is the altered note. In the same way, G♭ is the altered note in the following chord:

Ex. 67.



and G (♮) the altered note in the following:

Ex. 68.

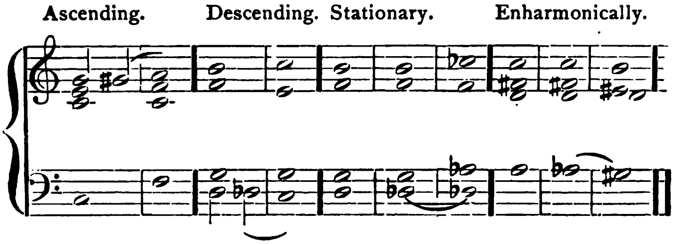


ALTERED CHORDS.

CONTINUED.

An altered note resolves regularly, either to the next degree above, or to the next degree below. Occasionally, like all dissonants notes, it remains stationary, forming a part of the following chord. It may also change enharmonically,

Ex. 69.

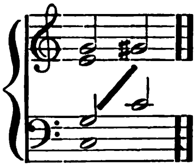


The regular resolution of the altered chord is the same as that of all dissonant chords, i. e., it resolves to the chord the root of which is a fourth above or a fifth below.

Resolutions to other intervals are classed as exceptional and will be found in the exercises.

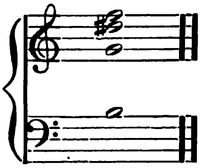
The altered note should never be doubled, nor should a note which is to be altered be doubled, as there would result a species of false-relation:

Ex. 70.



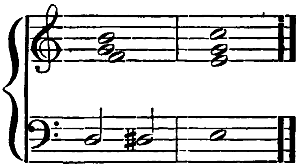
An altered ascending note should rarely be so disposed that it forms the interval of a diminished third with any other voice. The following is hard and disagreeable:

Ex. 71.



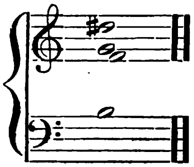
But it may be employed on the weak part of a measure when the interval is so separated that it becomes a tenth. In such a case it has more the character of a passing-note.

Ex. 72.



With the seventh of the chord placed under the altered note, forming the interval of an augmented sixth, the harmony is very agreeable:

Ex. 73.



ALTERED CHORDS.

CONTINUED.

In the following exercises the chords may be as few as possible, or the student may write a short phrase, introducing the altered chord. The altered chord will usually be preceded by the same chord not altered.

EXERCISES.

THE ASCENDING ALTERATION.

1. Move from an altered triad on C to chord of F. Make three dispositions, employing the altered chord in root position and two inversions.

2. Move from an altered major seventh chord on C (fourth order) to chord of F. Employ the altered chord in root position and three inversions.

3. Move from an altered dominant seventh chord on G to tonic. Employ root position and three inversions.

4. Move from an altered major ninth chord on G to tonic. Employ root position and three inversions. Employ five voices.

5. Same, without root, employing four voices.

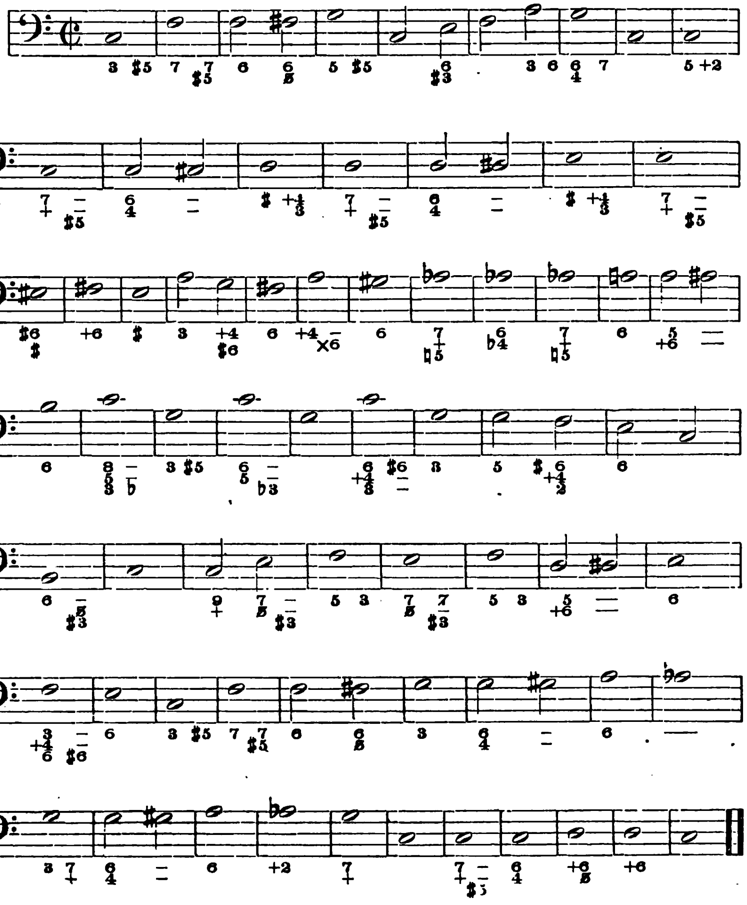
6. Move from altered minor ninth on E, in root position, to tonic major. (The inversions of this chord are not practicable.)

7. Move from four positions of altered minor ninth on E, without root, to tonic major.

EXERCISE.

The student should indicate the root of each altered chord by placing a letter under the bass note.

8.



ALTERED CHORDS.

CONTINUED.

THE DESCENDING ALTERATION.

Chords formed by the *descending* chromatic alteration of the fifth are much more important than those of the ascending alteration. They are almost wholly confined to chords founded on the dominant of the two modes, and, especially to the chord of the dominant seventh with root, the chord of the dominant seventh without root, and the chord of the minor ninth without root.

Examples of descending alterations on tonic harmony are to be found in the works of great composers. Such progressions are generally either more in the character of passing notes, or, the altered chord may be considered in two keys, in one of which it would be a dominant. See Examples 1, 2, and 3, under *A*, in following table.

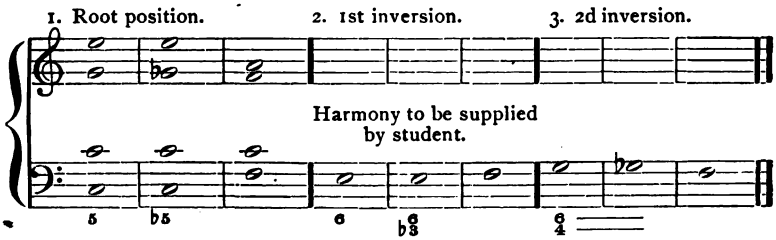
The descending alteration need not be preceded by the same chord not altered; it is generally true that any dominant harmony may enter without preparation.

The following table includes the principal altered chords and their regular resolutions, which is the same for all dissonant chords.

TABLE.

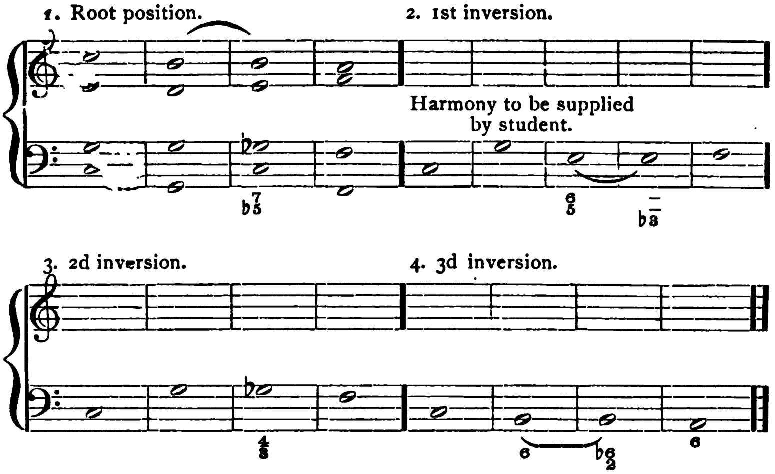
CHORDS ON A TONIC.

A. TONIC TRIAD.



If the first chord in each of the above examples be regarded as belonging to the key of F, then the altered chord would belong to the dominant of that key.

B. TONIC SEVENTH.

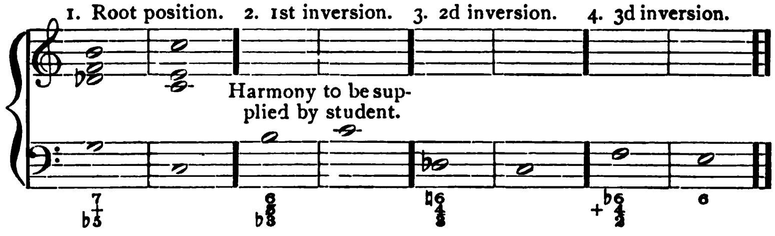


The majority of the above chords are so hard and disagreeable that they are little used.

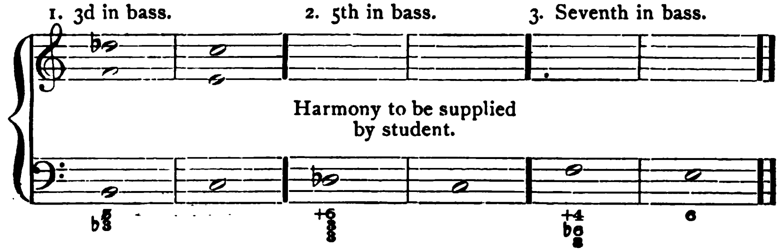
The following includes the more important altered chords:

CHORDS ON A DOMINANT.

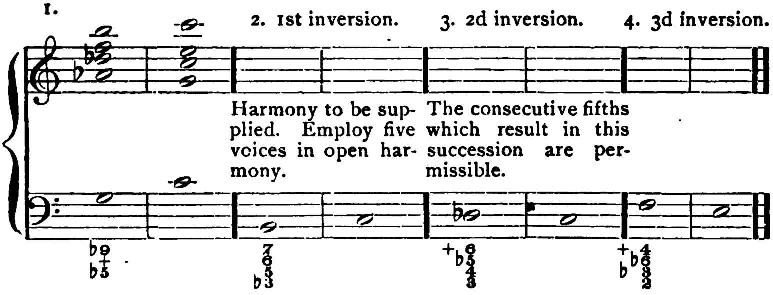
C. DOMINANT SEVENTH.



D. DOMINANT SEVENTH WITHOUT ROOT.



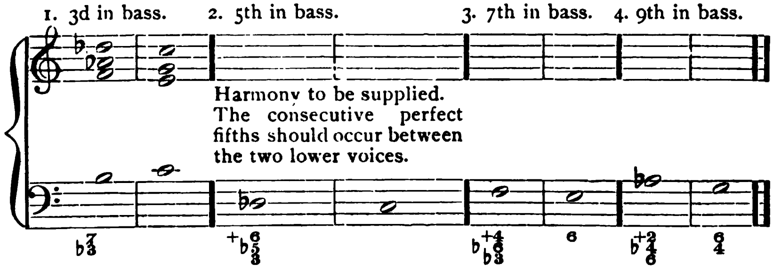
E. MINOR NINTH.



Harmony to be supplied. Employ five voices in open harmony.

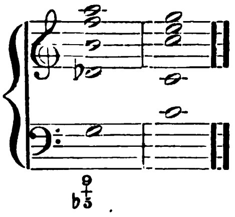
The consecutive fifths which result in this succession are permissible.

F. MINOR NINTH WITHOUT ROOT. (DIMINISHED SEVENTH.)

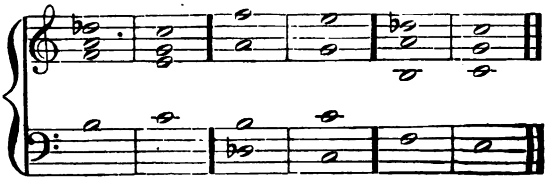


Harmony to be supplied. The consecutive perfect fifths should occur between the two lower voices.

The descending alteration of the fifth in a major ninth chord is little used; the effect being extremely harsh, even when preceded by the same chord not altered. With the root included, the only disposition tolerable is that of fundamental position:



Without root it is more often employed:



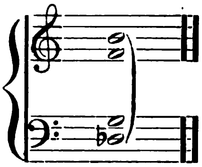
ALTERED CHORDS.

CONTINUED.

THE DESCENDING ALTERATION. THE IMPORTANCE OF THE SECOND INVERSION OF DOMINANT DISSONANT HARMONY, PRODUCING THE CHORDS OF THE AUGMENTED SIXTH.

When a chord stands in its second inversion with the bass note chromatically lowered, such bass note forms the interval of an augmented sixth with the third of the chord:

Ex. 74.

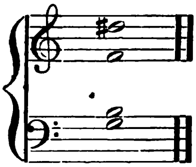


In the language of the modern French school, the term *augmented sixth chord* is restricted to certain dissonant chords founded on a dominant, and standing in this second inversion.

It is important that the student clearly understands that by *augmented sixth* is meant a dominant chord with its fifth in the bass, and with the bass note chromatically lowered.

There are other altered chords on a dominant which include the interval of an augmented sixth. In the following example:

Ex. 75.

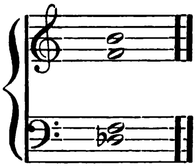


the interval of an augmented sixth occurs between the soprano and the alto. This is not classed, in the language of the schools as an augmented sixth chord, and that for the reason that the augmented interval does not occur between the *bass* and either upper voice.

Although there are several chords in which the interval of the augmented sixth may be found between the bass and an upper voice, there are three so prominent that when a musician speaks of an augmented sixth chord he has in mind one of the following three forms:

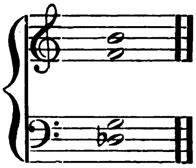
Either a dominant seventh without root, with fifth in bass and fifth chromatically lowered:

Ex. 76.



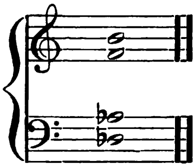
a dominant seventh *with* root, with fifth in bass and fifth chromatically lowered:

Ex. 77.



or a minor ninth without root, with fifth in bass and fifth chromatically lowered:

Ex. 78.

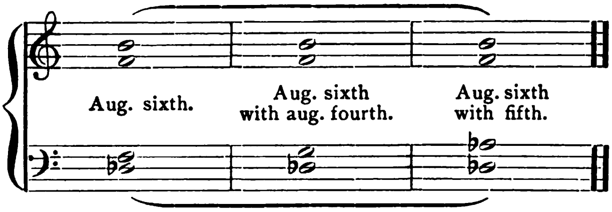


If the flat which is placed before the *D* in each of the three preceding examples were removed, the chords would stand as simple dominant harmony, in second inversion. With the fifth chromatically changed they become altered chords according to the definition given at the beginning of this chapter. When a musician speaks of an augmented sixth chord he means one of these three forms of the dominant. The first one, Ex. 76, is named "The Chord of the Augmented Sixth." The second, Ex. 77, is named "The Chord of the Augmented Sixth with Augmented Fourth," and the third, Ex. 78, is named "The Chord of the Augmented Sixth with Fifth."

These three forms are often heard in succession:

Three forms of augmented sixth chords.

Ex. 79.

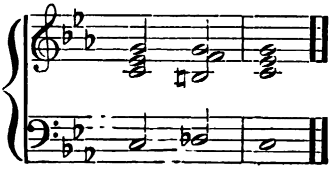


It is these three forms of dominant harmony which have been classified in popular text-books as the "Italian," the "French," and the "German" sixths.

The augmented sixth chords are irrespectively used in either the major or the minor mode.

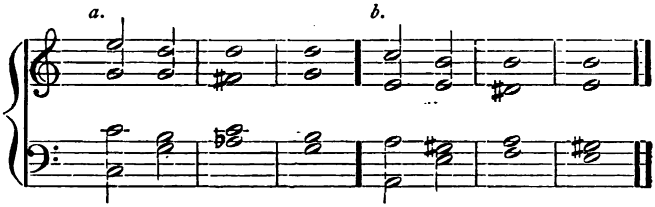
While listening carefully to the tonal effect produced by either one of these augmented sixth chords and the chord to which it makes its regular resolution, it will be noticed that the latter chord—the chord of resolution — sounds more like a dominant chord than like a tonic chord. In the examples in the table, p. 54, at *C* 3; *D* 2; *E* 3; and *F* 2; the second chord does not give the impression of a tonic on *C*, but rather of the dominant of *F*. As this is generally true, the augmented sixth chord, will usually be found on the ***dominant of the dominant***, resolving to the dominant of the original key. That is to say: an augmented sixth chord, introduced into a musical phrase, will not be built on the dominant of the key in which the phrase occurs, but on the dominant of *its* dominant. If built on the dominant of the prevailing key, it will usually change the key. There are examples, however, where this chord is used on the dominant of the original tonic, but usually coming between two tonic minor chords:

Ex. 80.



These altered chords, which as abstract chords are really in the key of the dominant, in no sense whatever give the effect of a modulation, and, as the chord of resolution will usually be the dominant of the original key no modulation with this regular resolution, is possible. Read the following where the altered chord is borrowed from the key of the dominant, but in which no sense of change of key is in the slightest degree awakened:

Ex. 81.



At *a* the augmented sixth chord is founded on *D*, the dominant of the dominant of the original key. The tonality of the key of C is in no way disturbed. The same is relatively true of the key of a, at *b*.

ALTERED CHORDS.

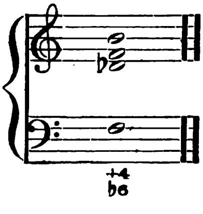
CONTINUED.

POSITIONS OF THE DESCENDING ALTERATION OTHER THAN THE SECOND INVERSION.

The three forms of the altered chord which have just been discussed are the most important and most frequently employed. There are other positions, however, which are used by modern composers. The ***third*** inversion of dominant dissonant harmony with altered descending fifth is not so frequent as is the second inversion, but it is sufficiently frequent to warrant its introduction.

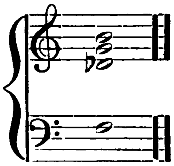
The third inversion of a dominant seventh without root:

Ex. 82.



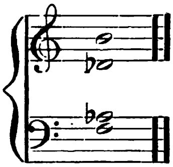
The third inversion of dominant seventh *with* root:

Ex. 83.



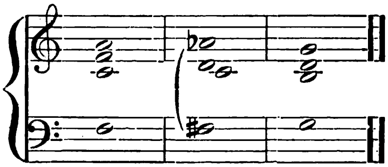
and the third inversion of a minor ninth without root:

Ex. 84.



This last example is the one most frequently employed. In this position the diminished third proscribed in the ascending alteration, (see Ex. 71) is freely used. And the following, resulting from the first inversion, is also freely employed:

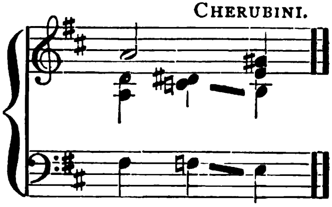
Ex. 85.



The two notes forming the diminished interval will *usually* be so disposed that they form the interval of a tenth as in example 85.

The consecutive perfect fifths referred to in the table, p. 54, at *E* 3; and at *F* 2; are found in the compositions of the purest writers:

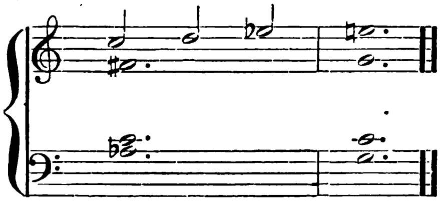
Ex. 86.



These fifths will nearly always be found between the two lower voices, as in the preceding example:

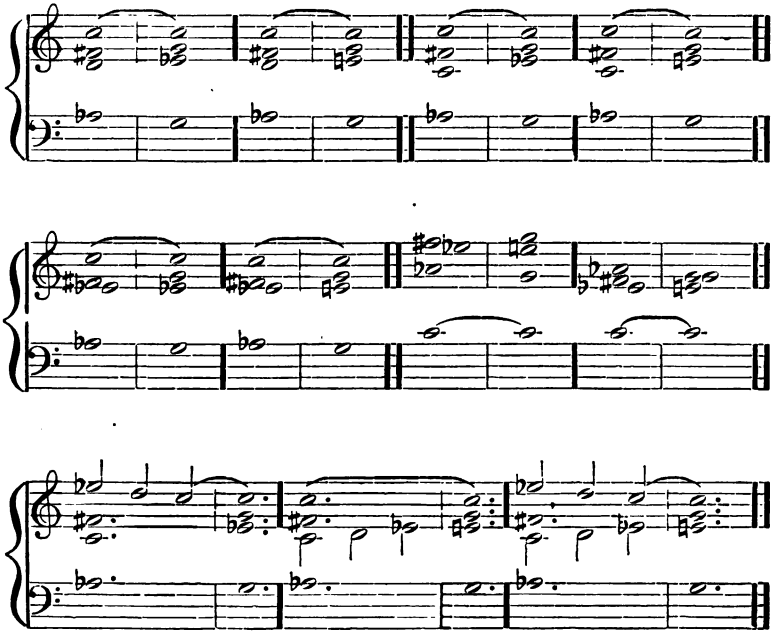
The irregular resolutions of the different forms of altered dominant harmony are most useful for purposes of modulation. Especial attention is called to passages like the following which are so often heard in modern music:

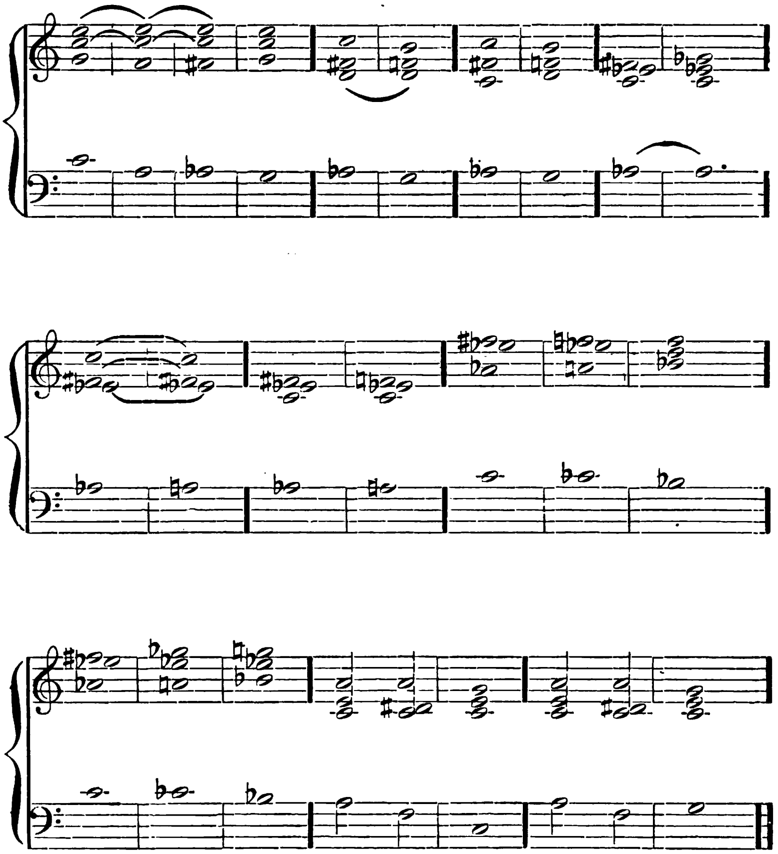
Ex. 87.



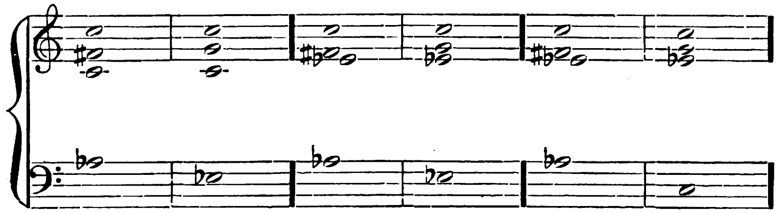
This contains the three forms of the augmented sixth chord, the last resolving irregularly to a six-four chord on the tonic major.

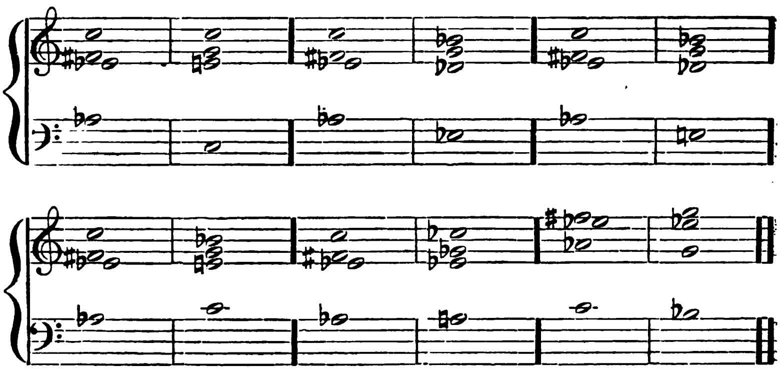
Reber, in his *Traité d'Harmonie*, gives the following as the more important irregular resolutions of dominant dissonant harmony with descending alteration of the fifth:





To these examples, Monsieur Theodore Dubois, in his more recent work intended to supplement the Reber treatise for use in the Paris Conservatory, adds the following:





1. Supply the harmony to the given bass in the measures left blank on pages 54–55–56.

2. Figure the chords from Reber, and Dubois, on pages 62–63–64.

Before attempting the following four exercises, it is suggested that the student again read the text on page 59.

3. Compose a phrase of eight measures in the key of C, introducing the "chord of the augmented sixth" (see example 76) which is nearest in tonal relationship to that key.

4. Compose a phrase of eight measures in the key of a, introducing the "chord of the augmented sixth with fourth." (Ex. 77) which is nearest in tonal relationship to that key.

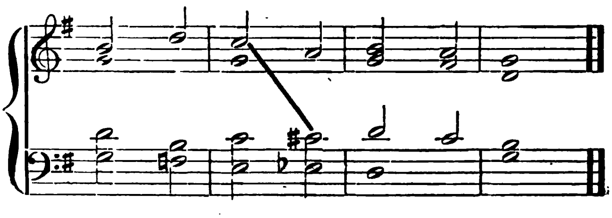
5. Compose a phrase in F, introducing the "Chord of the augmented sixth with fifth" (Ex. 78) which is nearest in tonal relationship.

6. Compose an exercise in C, sixteen measures in length, modulating to G by means of either of the augmented sixth chords, and, returning to C, introduce near the close the three forms of the augmented sixth chord (Exs. 79 and 87.)

7. Harmonize the following figured basses.

Cross-relations like the following:

Ex. 88.



are permissible. (See Pt. I, Ex. 120, page 64.)

These basses include the most useful and most commonly-used altered chords (descending alteration), with regular and irregular resolutions. Other altered chords are also introduced, which, on account of their exceeding harshness, are more rarely used.

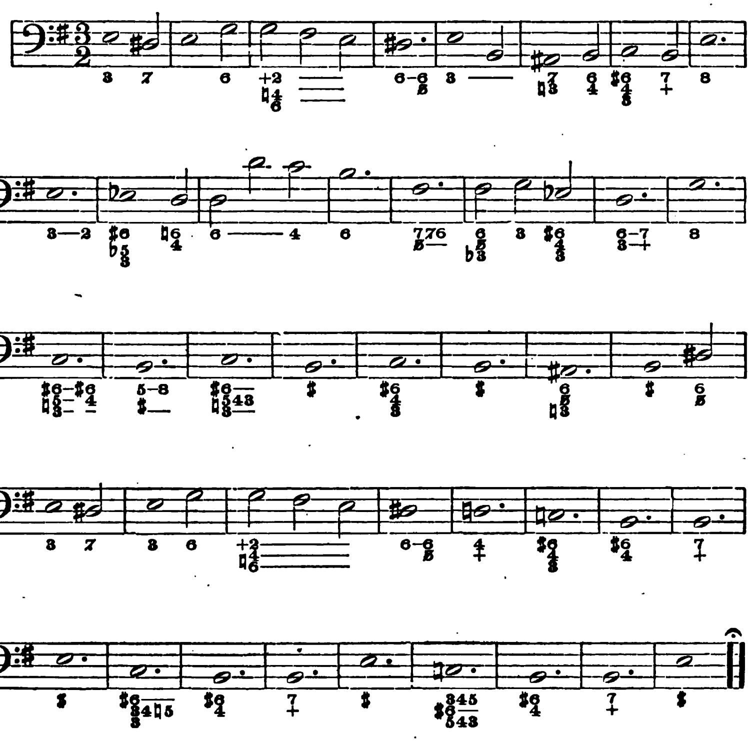
These basses present certain difficulties and have been carefully figured. As harmonies become complex they become correspondingly difficult to figure. The principle is always the same: figures are chosen which express the intervals to be formed between the bass and the upper voices.

For the sake of clearness, the chromatic signs ♯, ♮, are sometimes used in place of the sign given in the table.

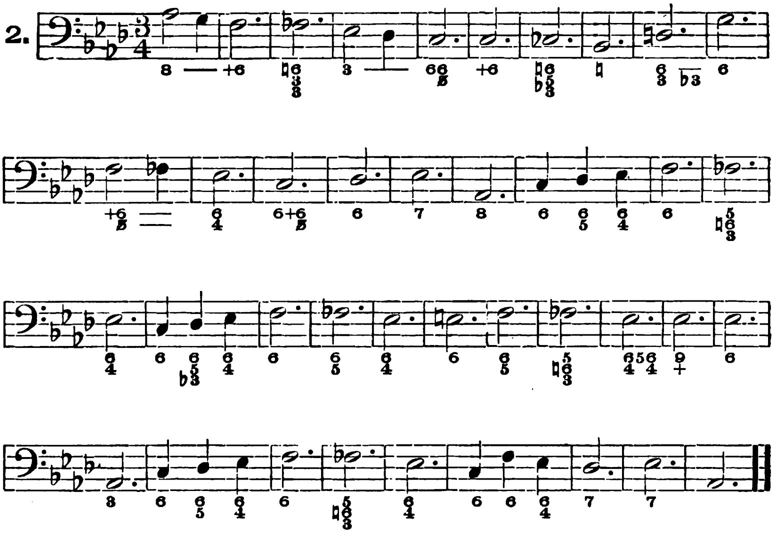
The author's harmonization of these exercises, together with all others in this text-book, are printed separately. They should not be examined till after the student has written the harmonies to the best of his ability. A comparison will then be valuable.

The student should indicate the root of each altered chord by placing a letter under the bass note.

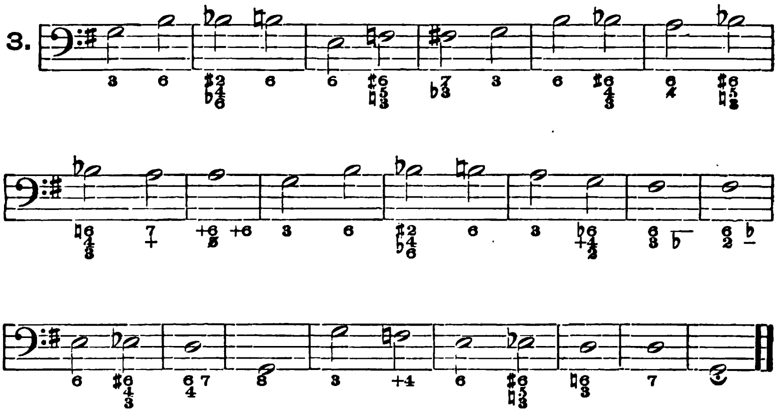
1.



2.

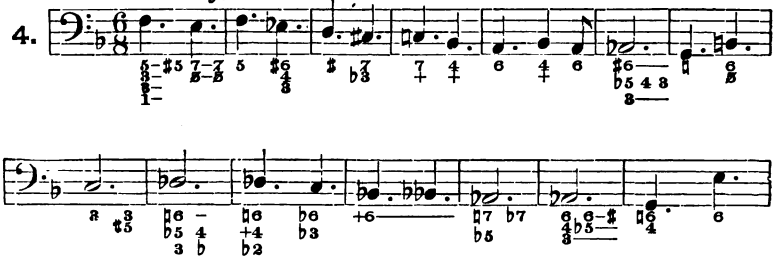


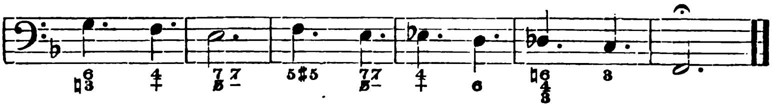
3.



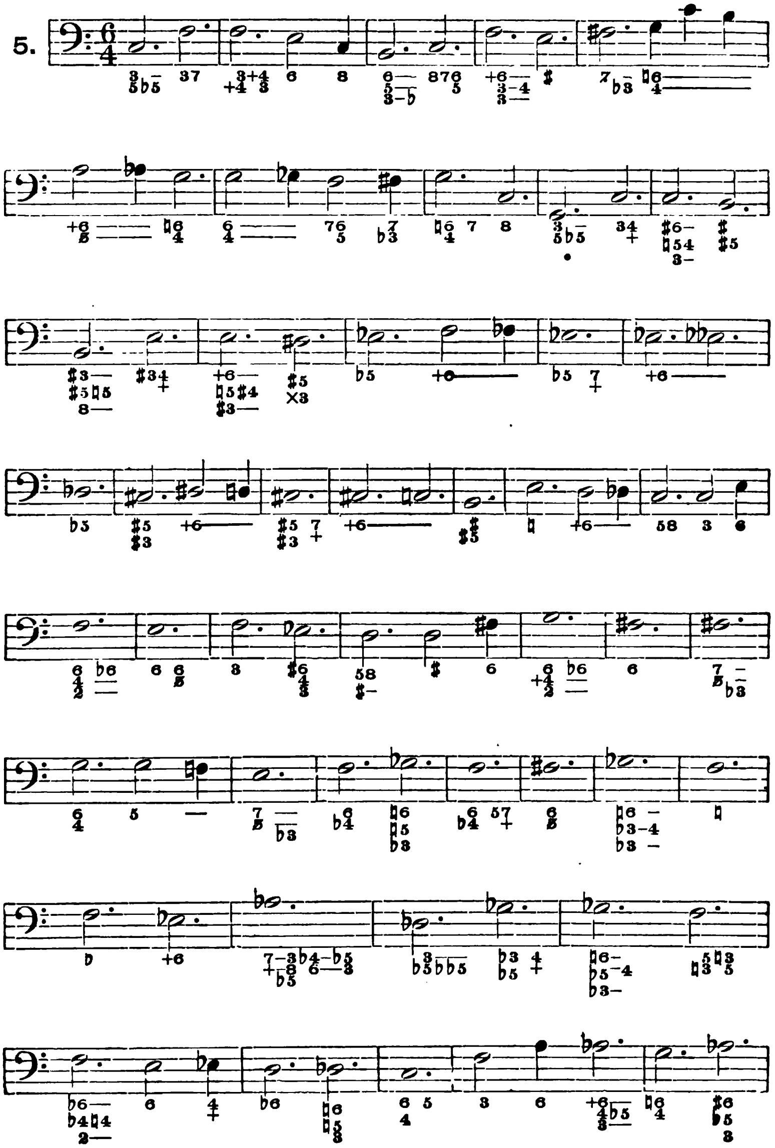
Close harmony.

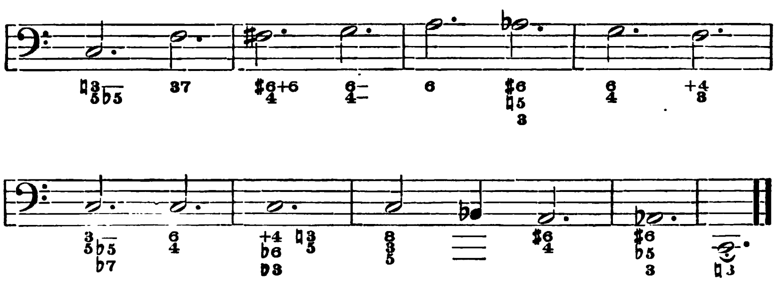
4.





5.





It is hoped that the chromatic alteration of the fifth of chords with a major third, has been thoroughly understood as the principle of altered chords. Chromatic alterations which are more in the character of passing-notes, i. e., which, on account of their duration, or special character do not effect the harmony, will receive attention in the chapter treating of ornaments.

On page 48 a number of triads are given which contain chromatic alterations, but which are not classed as altered chords. If a seventh — either major, minor, or diminished — be added to these triads, they would become dissonant chords, but not altered chords according to the definition given at the beginning of this chapter.

Among the theories treating of the notation and tonal-relationship of the altered chords in general, and the augmented sixth chords in particular, it would seem that the French system must eventually be universally accepted. It seems beyond discussion that a theory which gives them all a common origin, and which submits them without distinction to the few rules governing all other dissonant chords, must prevail. It is simple, and consistent, and is consecrated by the great composers.

It was claimed at the beginning of this chapter that musicians generally in America and England are accepting this French system.

Mr. C. H. H. Parry, who stands in the front rank of modern English musicians, writes as follows in *Grove's Dictionary:*

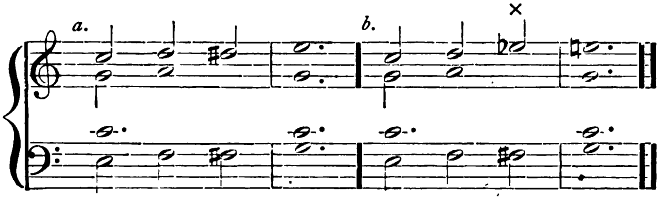
"The chord of the augmented sixth is probably nothing more than the modification of a melodic progression of one or two parts at a point where naturally they would be either a major or minor sixth from one another, the downward tendency of the one, and the upward tendency of the other causing them to be respectively flattened and sharpened to make them approach nearer to the notes to which they are moving. In the case of the augmented sixth on the flat second of the key, there is only one note to be altered, and as that note is constantly altered in this fashion in other combinations — namely by substituting the flattened note for the natural diatonic note, as D♭ for D in the key of C, by Carissimi, Bach, Beethoven, Chopin, in all ages of harmonic music — it seems superfluous to consider whether or no it is a chord with a double root as certain theorists propose. . ."

Nothing could be more uncompromising than the above from the pen of this distinguished English musician.

He adds: "The inversion of the above-mentioned augmented sixth, as a diminished third is remarkable for two reasons. In the first place, because when used with artistic purpose it is one of the most striking chords in modern music, owing to the gradual contraction towards the resolution, — as is felt in the employment of it by both Bach and Beethoven to the words 'et sepultus est' in the 'Crucifixus' of their masses in B minor and D respectively; and in the second, because a distinguished modern theorist having discovered that the augumented sixth is a double rooted chord, says that it should not be inverted, because the upper note, being a secondary harmonic, and capable of belonging only to the secondary root, should not be beneath the lower, which can only belong to the primary root!"

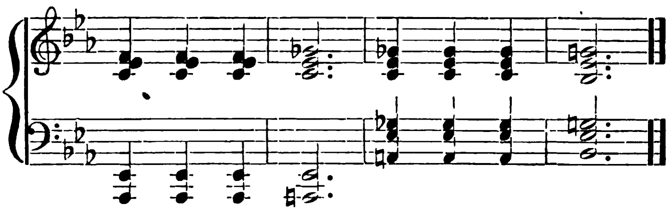
Notation of chords, is, like the spelling of words, but a means to an end. The important thing is the thought to be expressed, not the method of expression. And notation should and does very largely depend upon that which presents to the eye the easiest reading and which insures the best interpretation and performance. (See Ex. 56.) Many of the chords in the preceding exercises in this chapter would better serve their purpose notated differently; many of the descending alterations would better be notated flats, and some of the ascending alterations would better be notated sharps. This is because our habits have taught us that a sharp as a chromatic alteration, usually ascends when moved to from below, and a flat usually descends when moved to from above. (See p. 81, Pt. I.) But chromatic melody and chromatic harmony are not the same. The laws of tonal-relationship are of the utmost importance, and for this reason the harmonies in this chapter have been notated as they now stand. After the student has fully grasped the relation of chords to a certain tonic he may choose his notation, as musicians do. And yet, in the majority of cases the great composers agree in their notation of chords — either diminished seventh chords, or altered chords — founded on the *dominant of the dominant*. There seems to be as much uniformity in notation here, as in "writing the fourth note sharped in a chromatic ascending scale and the seventh note flatted in the descending scale." (See, Pt. I, Ex. 153.) Of the following notations:

Ex. 88.



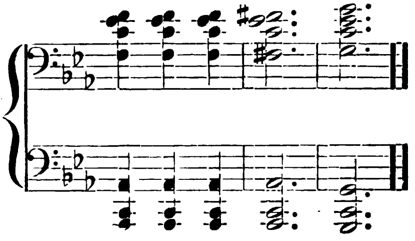
the majority of great composers would use the latter at *b unless* the chord (marked ×) were unmistakably a passing-note, and not an essential harmonic note. Here is the relation of *dominant of the dominant*. The chord marked × at *b* is a minor ninth on D, without root. Two examples from well-known passages are sufficient. In the Sonata, opus 31, No. 3, at the passage beginning at the third measure, Beethoven's notation is as follows:

Ex. 89.



Here the ascending note, which is distinctly harmonic, is written a flat. The chord is a minor ninth without root on F, the dominant of the dominant of the key of E♭. Later on, in the fourth bar, after the double bar, the ascending note is a sharp:

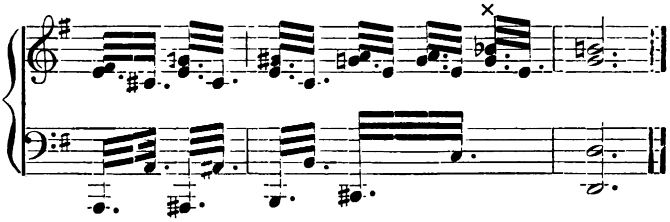
Ex. 90.



Here the modulation is to C minor and the dominant of the dominant is D; the third of the chord is F♯. As notated here the chord is an altered chord on the dominant of the dominant.

In the closing phrase of "The Song to the Evening Star," Wagner notates the ascending note a flat, even though it comes in the weak part of the measure and has more the character of a passing-note.

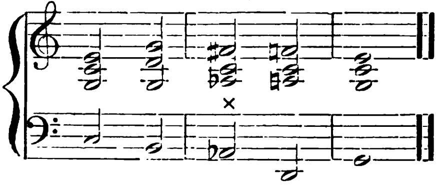
Ex. 91.



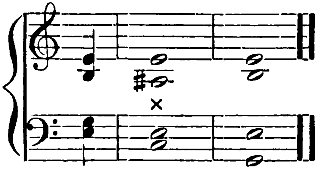
In conclusion, whatever notation is employed for the Altered Chords, the important thing is to have a knowledge of the combinations to which they can lead and how best to introduce them. And although practice will undoubtedly lead to this result, it would seem best, as we have emphasized, to group them all, theoretically, under a principle which gives them an identity of origin and submits them to the laws common to all dissonant chords.

The following are examples of altered chords as used by various composers.

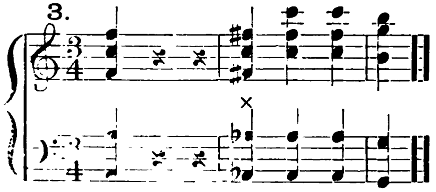
1. T. Dubois, "Aben-Hamet."



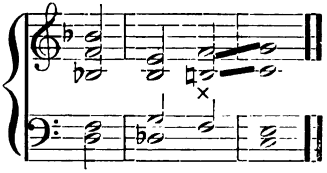
2. Gounod.



3. Beethoven.

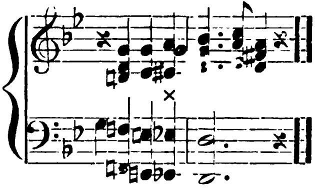


4. Spohr.

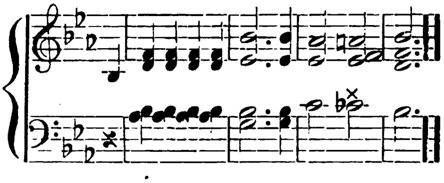


The preceding four illustrations are examples of the "chord of the augmented sixth." (Dominant seventh without root.) The altered note in the first illustration — A♭ — could not have been doubled, had the chord made a regular resolution. The fifths between soprano and alto in No. 4, are not unusual. Here the perfect fifths follows the imperfect. Many theorists, even at the beginning, allow consecutive fifths if *either* fifth is diminished. As the perfect fifth following the imperfect requires more careful treatment, it seems best not to allow this progression until the student has gained a certain amount of experience in writing.

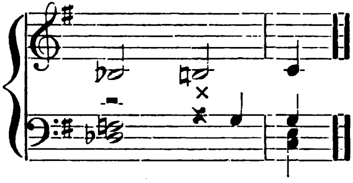
5. MOZART, Symphony in G.



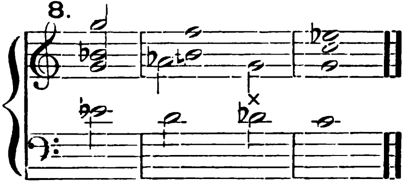
6. BEETHOVEN.



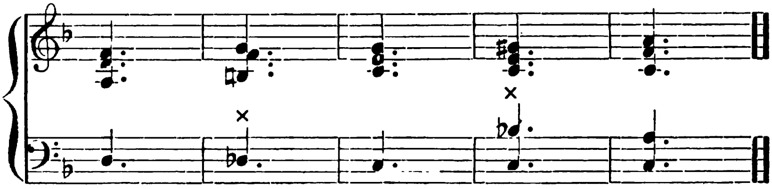
7. WAGNER.



8. BERLIOZ, "Damnation of Faust."

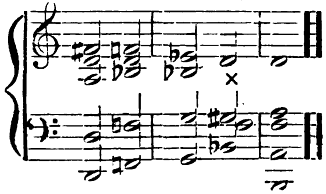


9. SCHUMANN.

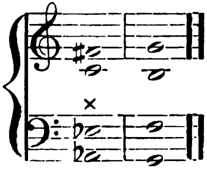


The preceding illustrations from 5 to 9, inclusive, are examples of the "chord of the augmented fifth with fourth." (Dominant seventh with root.) They need no explanation. The second marked chord in No. 9 will be recognized as a dominant seventh with *ascending* alteration of the fifth.

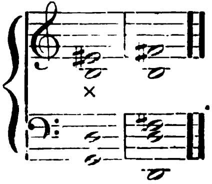
10. MASSENET, "Eve."



11. SAINT-SAENS.

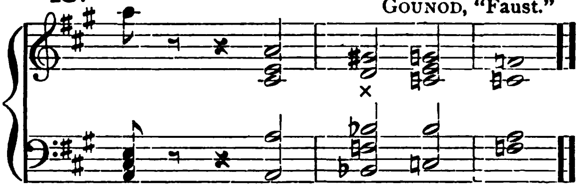


12. "SAMSON AND DELILAH."



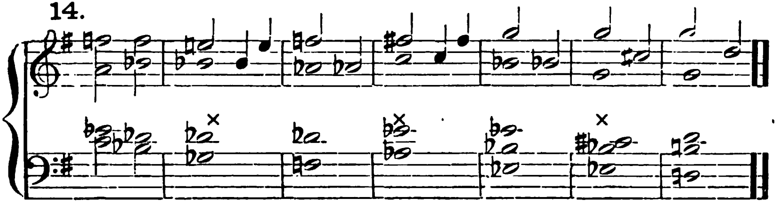
13.

GOUNOD, "Faust."



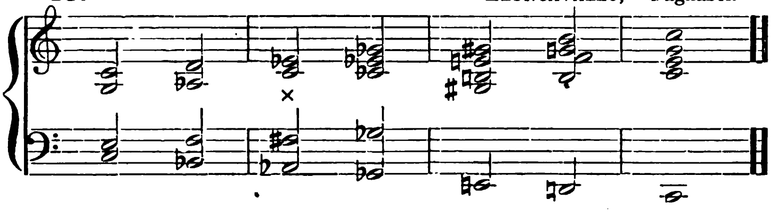
GOUNOD, "Mors et Vita."

14.



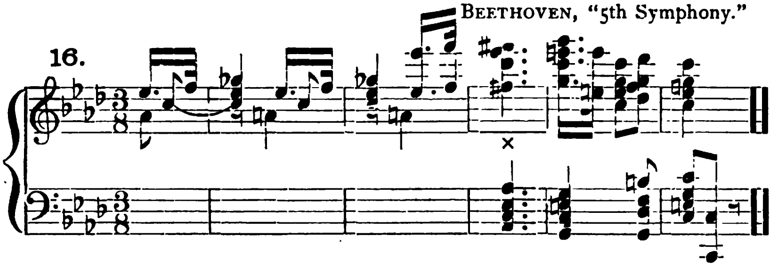
15.

LEONCAVALLO, "Pagliacci."



BEETHOVEN, "5th Symphony."

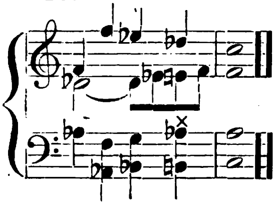
16.



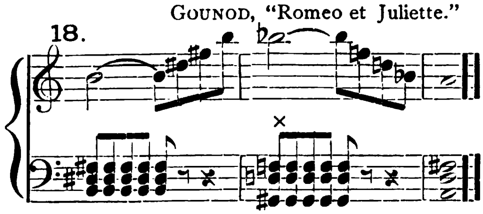
The numbers 10 to 16 inclusive contain examples of the "chord of the augmented sixth with fifth." (Minor ninth without root.)

The following examples, containing the augmented sixth inverted (diminished third,) are extremely interesting. This is the inversion referred to by Mr. Parry.

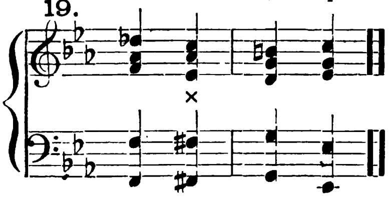
17. GOUNOD, " Mors et Vita."



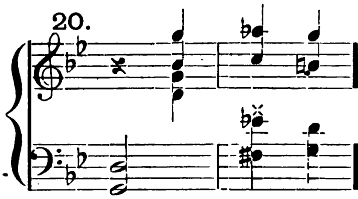
18. GOUNOD, "Romeo et Juliette."



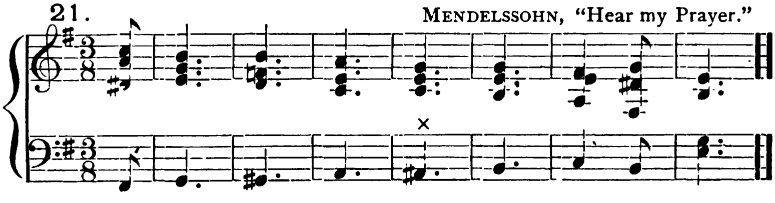
19. VERDI, " Requium."



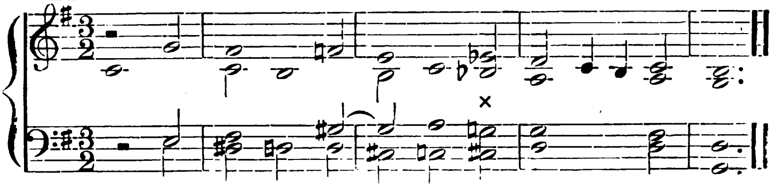
20. SCHUMANN.



21. MENDELSSOHN, "Hear my Prayer."



22. BACH. Mass in B.

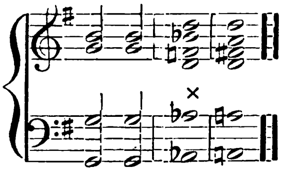


EXERCISES.

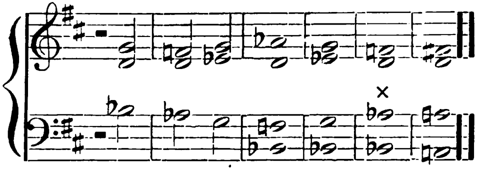
Name the root of each of the altered chords in the preceding 21 examples. Indicate the regular, and the irregular resolutions.

Several times attention has been called to the fact that composers, for practical purposes often notate chords incorrectly. At the chords marked x in the following examples, the notation is that of a dominant seventh chord:

23. BEETHOVEN.



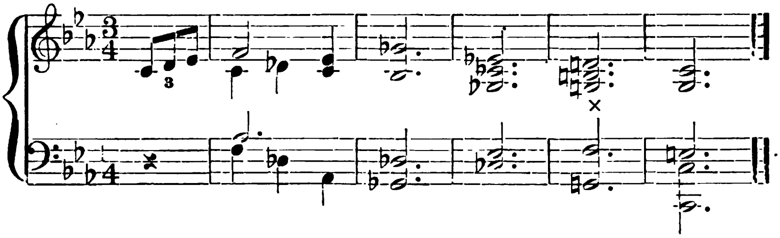
24. CHERUBINI.



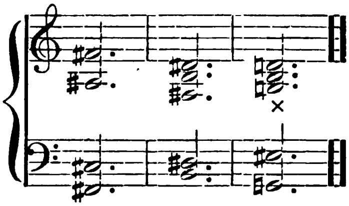
The tonal relation and resolution of these chords show them to be altered chords. The A♭ in each instance is really a G♯. Thus it will be seen that certain forms of the altered chords may, by enharmonic treatment, become dominant seventh chords, and *vice versa*, such transformations often lead to unexpected and beautiful modulations. The example from Beethoven's fifth symphony, given on page 73, will suggest to the student the manner in which such changes are often made.

The following from Dvořák's "Spectre's Bride" contains a most unexpected and beautiful resolution of an altered chord, here notated, for practical purposes, a dominant seventh chord:

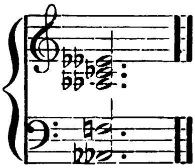
25.



This is not so difficult to analyze as it appears to be. If the chords in the second and third measures be notated in B, instead of C♭, the relationship of the chords will be easier to follow. Written thus, these two chords, with the altered chord on the dominant of the dominant would be written as follows:



The notation of this chord in the key of C♭ — the key of the chords immediately preceding — would be:



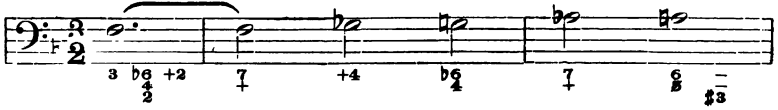
No better example than this from Dvořák could be given to show the advisability of often notating chords incorrectly. This passage is especially interesting on account of the unusual resolution of the augmented chord.

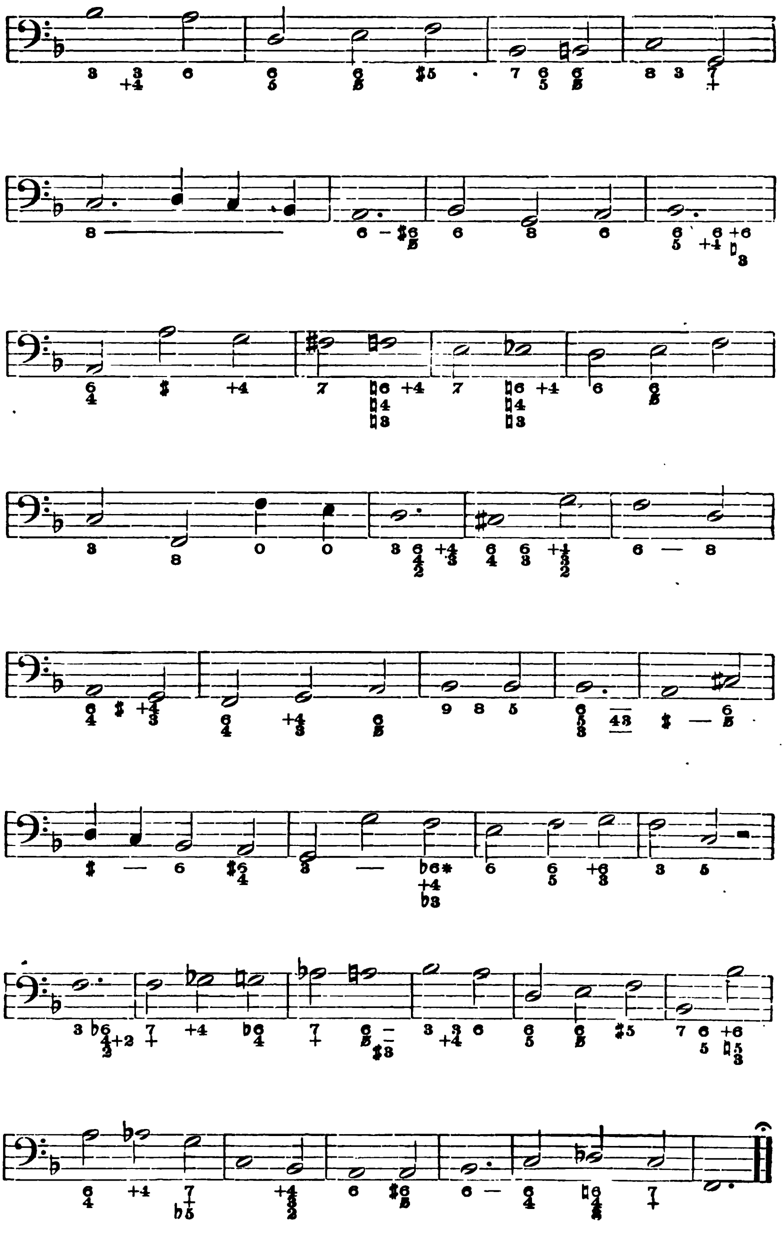
The following exercise contains chords with both ascending and descending alterations. The character o (measure 16) always denotes an absence of harmony, i. e. the notes over this character are not to be harmonized.—

For an explanation of the figures 9 8 (measure 22) see page 86. It seemed best to place this exercise here on account of the many altered chords it contains.

EXERCISE.

ALEXANDRE GUILMANT.





---

* See Ex. 84, page 61.

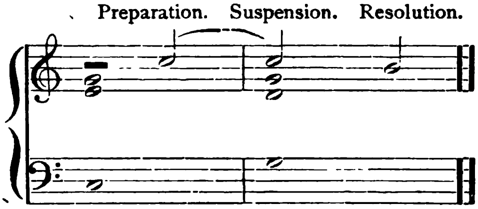
CHAPTER V.

SUSPENSIONS.

A suspension is an artifice in composition which necessitates two chords, and which consists in prolonging one of the notes of the first chord into the second chord in such a way that it becomes a note foreign to this second chord, i. e., it becomes a dissonant note requiring a resolution.

The note in the first chord is called the *preparation*, the prolonging of this note into the second chord is the *suspension*, and the moving of the suspended note to its place in the second chord is the *resolution*.

Ex. 92.

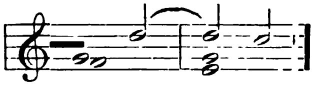


Suspensions are divided into two general classes: those which resolve down and those which resolve up. These latter are often called *retardations*.

The rules governing the treatment of suspensions are very simple. With few exceptions, a suspension may occur in any voice and in any inversion.

The *preparation* should as a rule be as long as the *suspension*, and the *suspension* should usually come on the accented part of the measure.

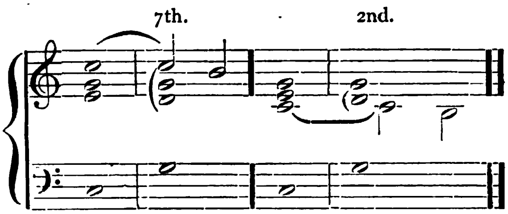
Ex. 93.



The above rule regarding the length of the preparation, and the place in the measure where the suspension should occur, may be disregarded in sequences, and in music of a slow tempo.

The *suspension* should as a rule form the dissonance either of a *seventh*, or a *second*, with one of the notes of the chord:

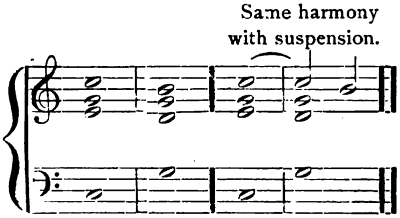
Ex. 94.



Suspensions which do not form a dissonance of a seventh or of a second are generally vague and characterless.

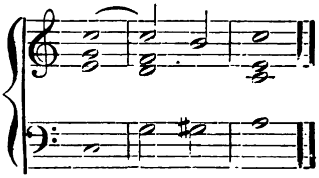
It will be seen from the above examples that the suspension stands in the place of the note to which it eventually resolves.

Ex. 95.



The harmony may change with the resolution of a suspension, provided the note of resolution forms an integral note of the new chord.

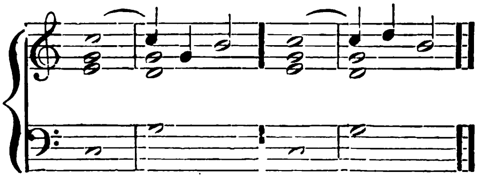
Ex. 96.



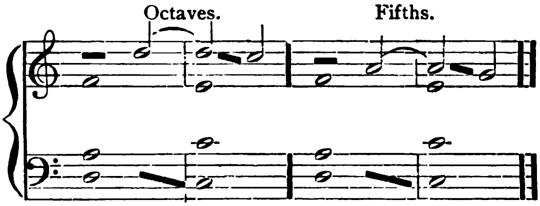
No other voice should move in *similar* motion to the note of resolution of the suspension. See Ex. 11, page 6.

The suspension may pass to another note of the second chord before making its resolution:

Ex. 97.

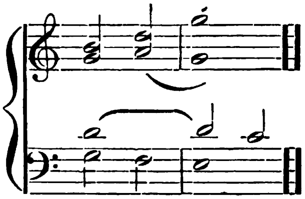


As the suspension is but a substitute for the note to which it resolves, consecutive fifths and consecutive octaves which would occur if the suspension were not introduced, are forbidden.



Ex. 98.

This rule for octaves is often disregarded in sequences, and 5ths are allowed in suspensions resolving to a first inversion:



Ex. 99.

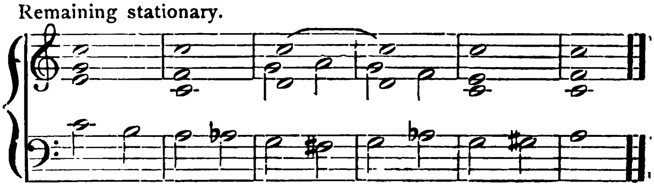
Attention is once more called to the fact that when the first inversion is employed, many progressions which would be harsh and disagreeable with other positions, become admissible.

EXCEPTIONAL RESOLUTIONS.

Like all dissonant notes, the suspension, in place of resolving diatonically may either remain stationary, forming a part of the new chord, or it may ascend chromatically. We may repeat, then, what was stated on page 5:

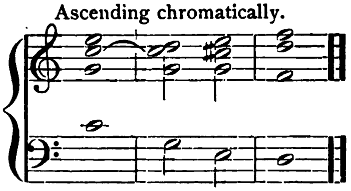
"Three resolutions, then, are possible for any dissonant note whatever:

The dissonant note may descend diatonically;
The dissonant note may remain stationary;
The dissonant note may ascend chromatically."



Ex. 100.

Ex. 101.



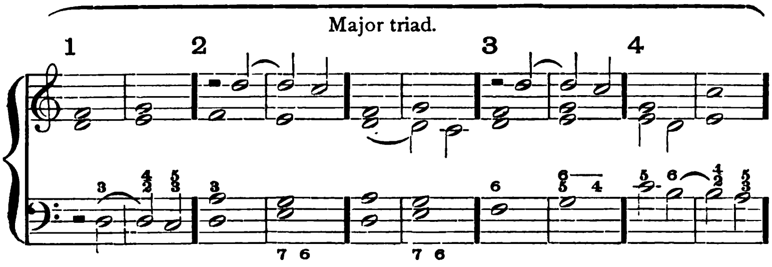
This last is rarely employed.

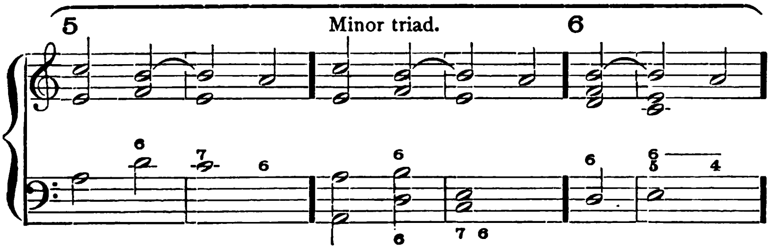
The system of figuring the suspensions is the same as for all combinations hitherto used, i. e: the figures indicate the distance between the bass note and the upper voices. There are, however, many chords with suspensions which it is almost impossible to figure clearly.

When the figure 7 is followed by 6, so, 7-6, these figures generally signify a suspension and not a chord of the seventh.

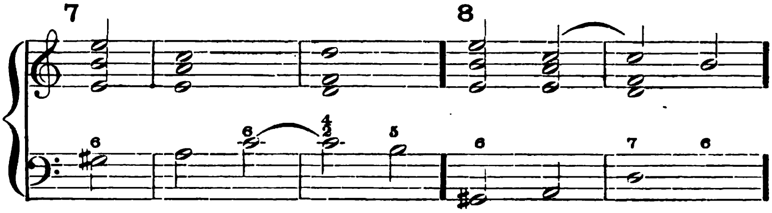
The figures $^4_2$ represent a suspension and not a secondary seventh. A secondary seventh with seventh in bass is figured either 2 or $^6_{\substack{4\\2}}$. See page 40.

Keeping these two points in mind the figuring will present no difficulties. The following table of suspensions is given by Reber. The examples 9 to 29 *as abstract chords*, may be analyzed in two ways: either as suspensions or as dissonant chords already known and classed. The student can generally determine by the context whether the chord is a suspension or a seventh chord.

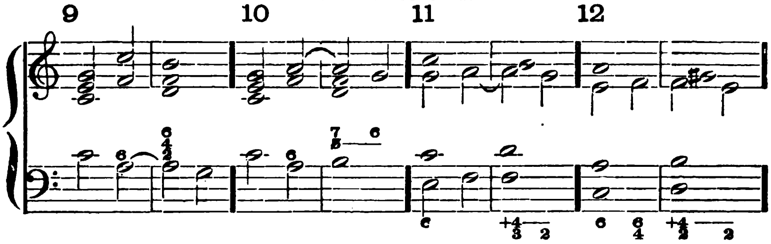




Diminished triad.

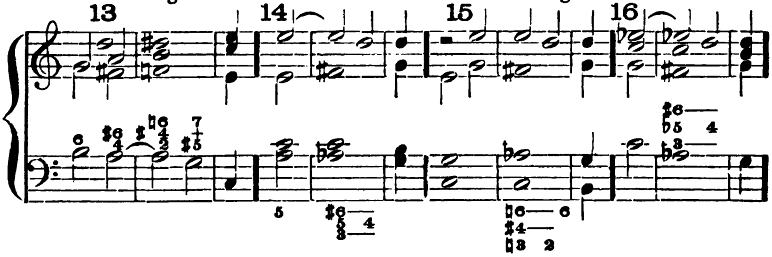


Dominant seventh.

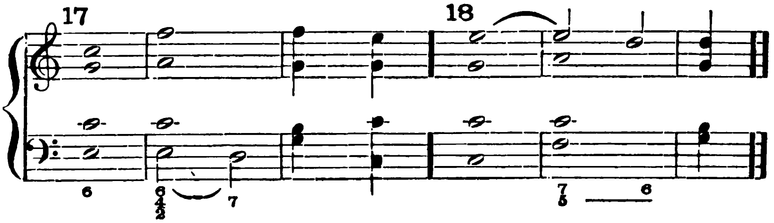


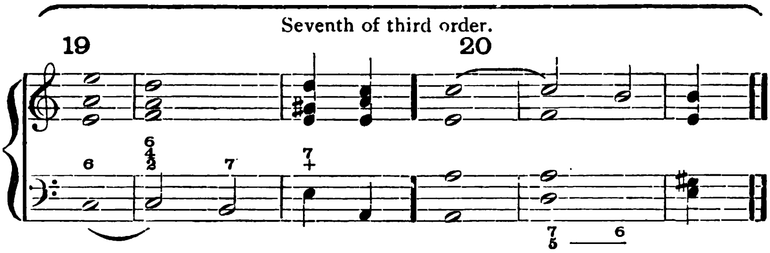
In analyzing No. 9, refer to Ex. 47, page 32.

With ascending alteration of the fifth. With descending alteration of the fifth.



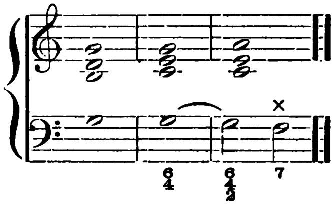
Seventhe of second order





The suspension of the root in a seventh chord of the fourth order produces a bad effect because the resolution gives a stronger dissonance than the suspension :

Ex. 102.



The suspension of the root of dominant ninth chords is not practicable.

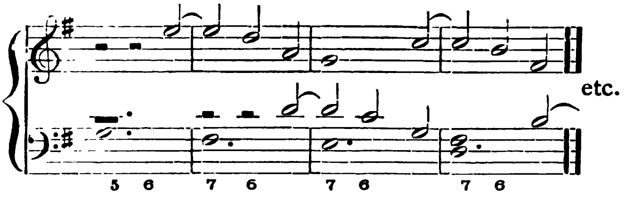
EXERCISES.

Copy the basses in preceding table with accompanying figures, and harmonize them without referring to the table. This will make the succeeding exercise much easier in familiarizing the student with the figuring.

It will be noticed that in the table the preparation of the suspension frequently enters after the other notes of the chord have been sounded. This is not necessary but as it gives more prominance to this part it is well to observe it whenever convenient. It adds force and character and will often suggest imitative treatment in other voices.

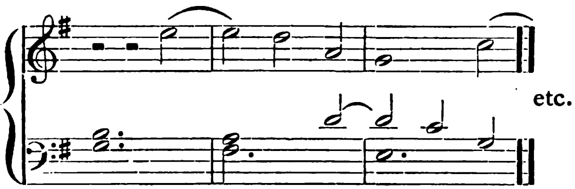
In most sequential suspensions the suspension in one part will suggest a corresponding symmetry in other voices. These imitations are sometimes imitations of intervals, but quite as often of rhymth only. As a rule it is in better form for the voice which is to imitate a preceding figure not to enter until it begins the imitation, and, as in all sequences, more freedom is allowed in progression of the different parts.

Ex. 103.



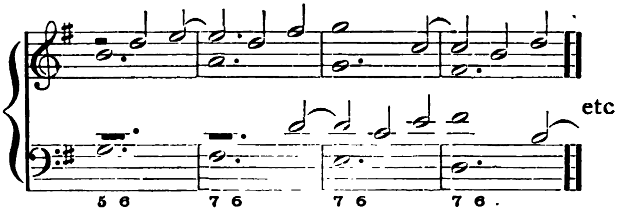
In the preceding example the middle voice imitates the upper voice and does not enter until it begins the imitation. This gives the middle voice more character than if it accompanied the other parts from the beginning as follows:

Ex. 104.



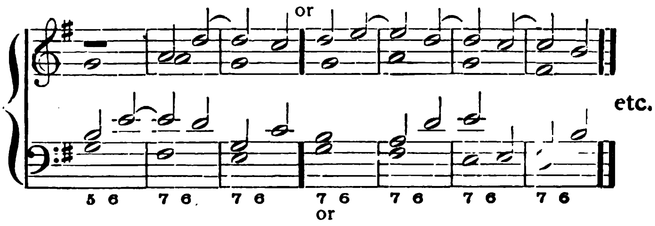
But if a voice does not imitate, i. e, if it only accompanies the other voices, it is usually better for it to enter at the beginning. See alto below:

Ex. 105.



It will be seen from the preceding examples that this bass may be treated in various ways. Other figures are possible:

Ex. 106.



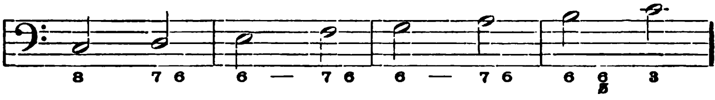
Harmonize the following basses, introducing imitative treatment.

EXERCISES.

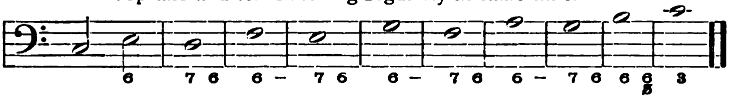
SUSPENSIONS.

SUSPENSION OF THE ROOT IN CONSONANT HARMONY.

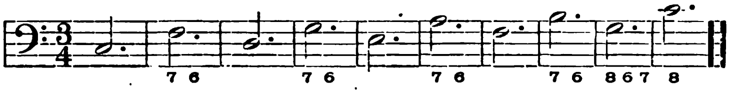
Hidden octaves or hidden fifths are not objectionable in sequences, especially if they occur between inside voices.

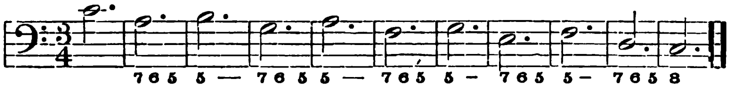
1.


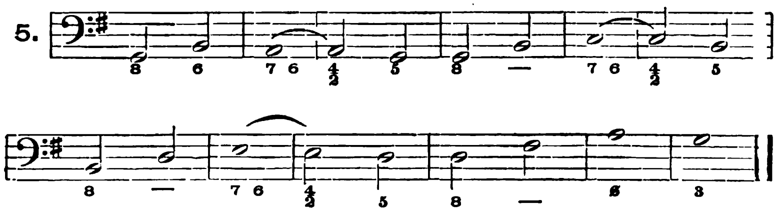
Soprano and tenor moving regularly at same time.

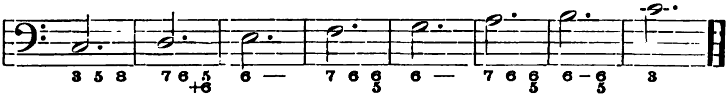
2.


Suspension alternating between soprano and alto; alto entering in third measure.

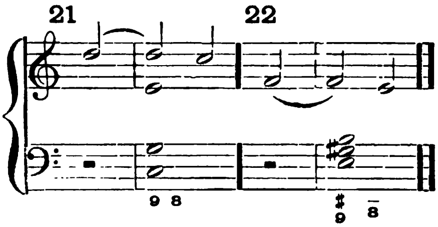
3.


4.


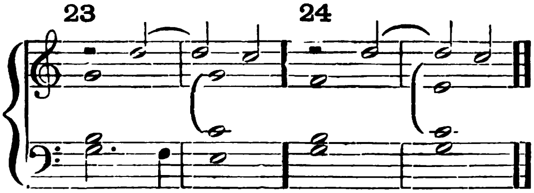
5.


6.


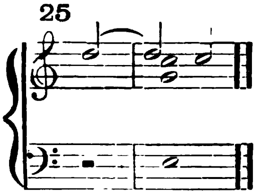
The root of a chord may be suspended in one voice and resolved in another voice at the same time. When this is done, the two notes forming the suspension and the resolution should be separated by at least a ninth, and the resolution will usually be taken in a lower voice:



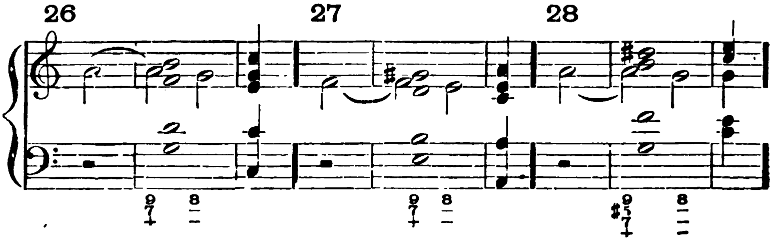
When the resolution occurs in an inside voice, the note of resolution and the suspension should be separated by another voice, and should be moved to by contrary motion:

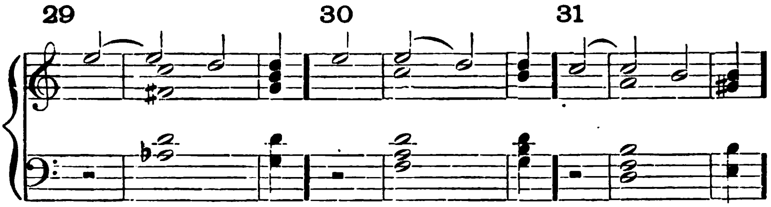


If the notes suspended and resolved at same time are not separated by at least the interval of a ninth, the effect is extremely harsh:



The preceding suspensions are usually called the suspension of the octave of the fundamental, or, suspension of the ninth. The suspension of the ninth may be applied to the greater part of the dissonant chords:





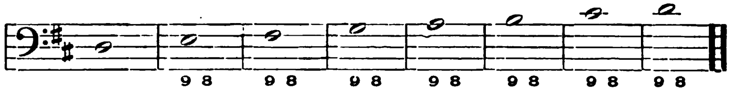
EXERCISES.

Copy the chords from 26 to 31 inclusive, indicating what chords they are, i. e., whether they are sevenths, ninths, altered, etc.

It should be understood that the figures 9 – 8 indicate the suspension of the root in *consonant* harmony. Dissonant harmony would require a $\underset{+}{7}$ under the 9, so — $\overset{9}{\underset{+}{7}}$.

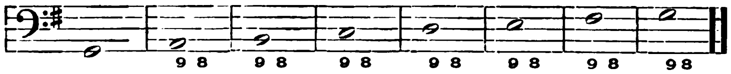
Suspension alternating between soprano and alto, with these parts crossing each other.

1.



Suspension alternating between soprano and tenor.

2.



Further use of the 9 – 8 suspension will be found at the close of this chapter.

SUSPENSION OF THE THIRD.

The suspension of the third is employed more frequently than any other. It may be used in all chords, either consonant or dissonant and in any voice. We shall not give a table of notes of this suspension. The following table of figures is sufficient:

$\begin{smallmatrix}5\\4\end{smallmatrix}\ \overline{3}$ signifies a triad with root in the bass and third suspended.

$\begin{smallmatrix}5\\2\end{smallmatrix}\ 6$ signifies a triad with 3d suspended in the bass.

$\begin{smallmatrix}7\\4\end{smallmatrix}\ \underline{6}$ signifies a triad with 5th in bass and third suspended.

$\begin{smallmatrix}7\\5\\4\end{smallmatrix}\ \begin{smallmatrix}-\\3\end{smallmatrix}$ signifies a chord of the seventh root in the bass and third suspended.

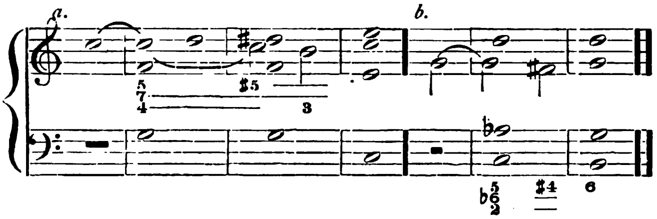
$\substack{5\\4\\2}\ \substack{6\\5}$ signifies a chord of the seventh with 3d suspended in the bass.

$\substack{7\\4\\3}\ \substack{+6\\-\\-}$ signifies a chord of the seventh with 5th in bass and third suspended.

$\substack{6\\5\\2}\ \substack{-\\4\\-}$ signifies a chord of the seventh with 7th in bass and third suspended.

The chord of the dominant seventh with alteration, either ascending or descending, would demand the same figures as those given above for the dominant seventh, with the addition of the chromatic sign necessary for the alteration:

Ex. 107.



$\substack{9\\7\\4}\ \substack{-\\-\\3}$ signifies a ninth chord with root in bass and 3d suspended.

$\substack{6\\4\\5}\ \substack{7\\6\\5}$ signfies a ninth chord with 3d suspended in the bass.

$\substack{3\\5\\2}\ \substack{-\\+4\\-}$ signifies a ninth chord with 7th in the bass and 3d suspended.

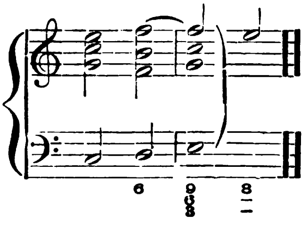
The figuring for the suspension of the 3d in ninths *without* the root, will be found self-explanatory.

EXERCISES.

Write an example of each of the above suspensions of the third, including the alteration both ascending and descending of the dominant seventh chord. In each example write at least one chord containing the preparation, another with the suspension, and a third giving a resolution.

The resolution of the 3d at the same time it is suspended in another voice may occur if the two notes be separated by a ninth. This interval should usually come between the two outside parts:

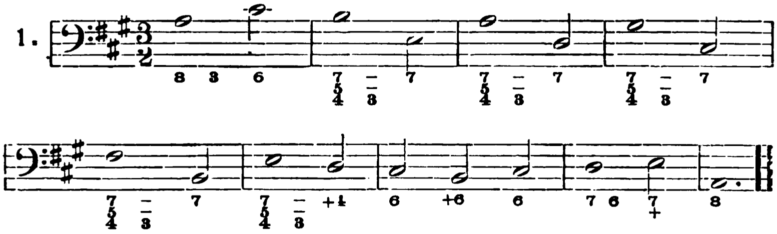
Ex. 108.



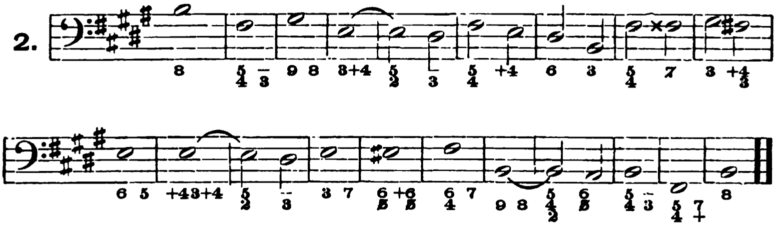
It may occur between inside voices according to restrictions in examples 23–24, page 86.

EXERCISES.

1.



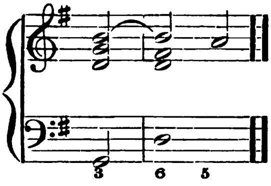
2.



SUSPENSION OF THE FIFTH.

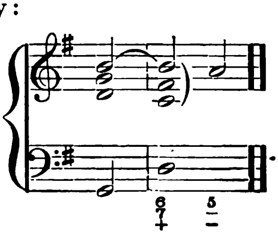
The suspension of the fifth in *consonant* harmony does not produce a dissonance of any sort and is therefore not a true suspension:

Ex. 109.



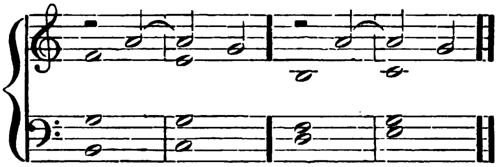
The suspension of the fifth in *dissonant* harmony produces a dissonance either of a seventh or of a second and is much employed on dominant harmony:

Ex. 110.



The fifth may be suspended at the same time that the fifth, not suspended, is placed in a lower voice. The conditions are the same as those already given for the root, or the third, when suspended and resolved at same time, i. e., the two notes forming the suspension and the resolution should be separated by another voice:

Ex. 111.

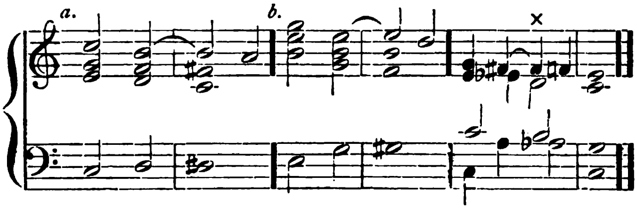


Examples of the suspension of the fifth will be found at the close of the chapter.

SUSPENSION OF THE SEVENTH.

The suspension of the seventh is little employed except in chords of the minor ninth without root:

Ex. 112.



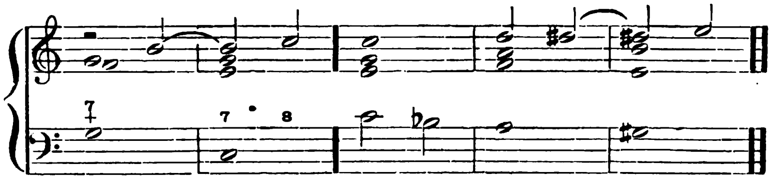
The suspension of the ninth is almost never employed.

RETARDATIONS.

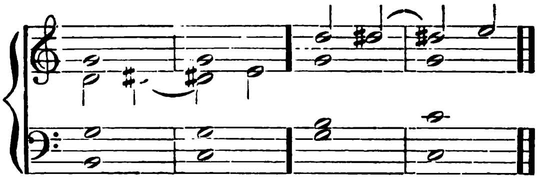
Retardations, or suspensions which resolve diatonically up instead of diatonically down, are much employed in modern harmony.

Either the root, third, fifth, seventh, or ninth may be retarded. Examples of each are here given.

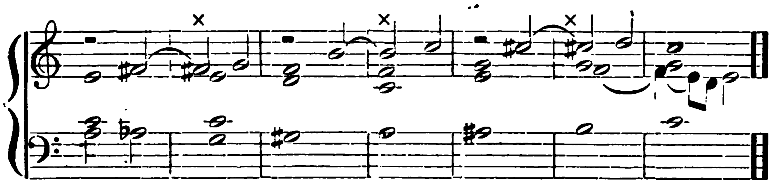
Retardation of the root.



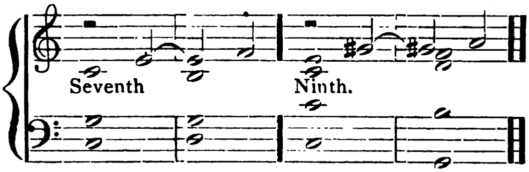
Retardation of the third.



Retardation of the fifth.

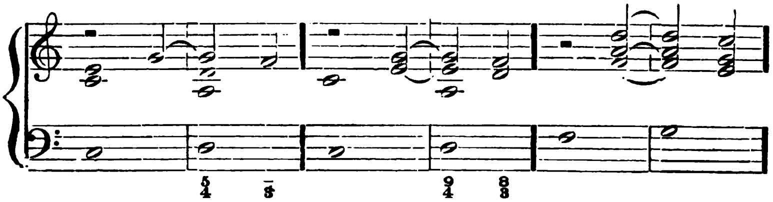


The retardation of the seventh and of the ninth is much employed by Wagner.

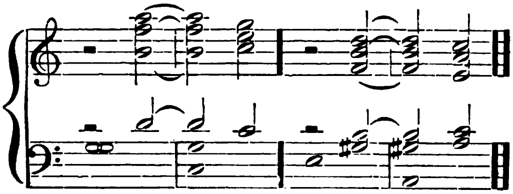


Two, three, four, or five notes may be suspended simultaneously. When more than three notes are suspended at a time, some of the parts will usually resolve up (retardation) while the others resolve down:

Simple suspension. Double suspension. Triple suspension.

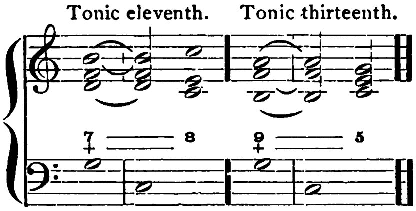


Quadruple suspension. Quintuple suspension.



The suspension of a dominant seventh chord, or of a dominant ninth chord — either major or minor — with the addition of a tonic placed in the bass, are known in musical theory as the chords of the *tonic eleventh*, and the *tonic thirteenth*:

Ex. 113.

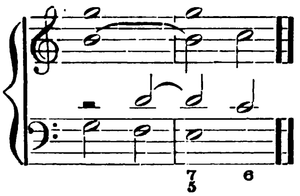


Attention is called to the figuring of the above chords. To avoid confusing these figures with others, the clearest way would seem to be to *prolong* the figures of the preceding chord; this leaves no doubt as to what is intended.

Note. These chords of the tonic eleventh and tonic thirteenth are much employed, but more often as appoggiaturas, and on a *pedal*, than as simultaneous suspensions. See page 94.

Note. The 7–6 suspension may include, and often does, the retardation of the fifth, in which case both the seventh and the fifth resolve to the root of the following chord:

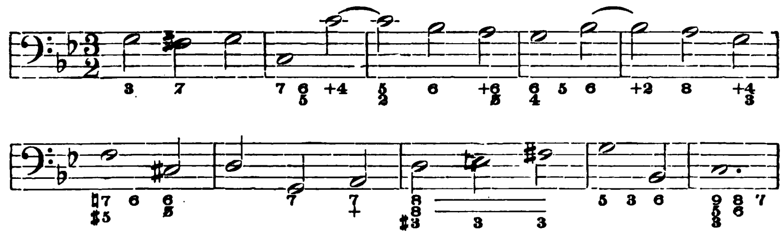
Ex. 114.

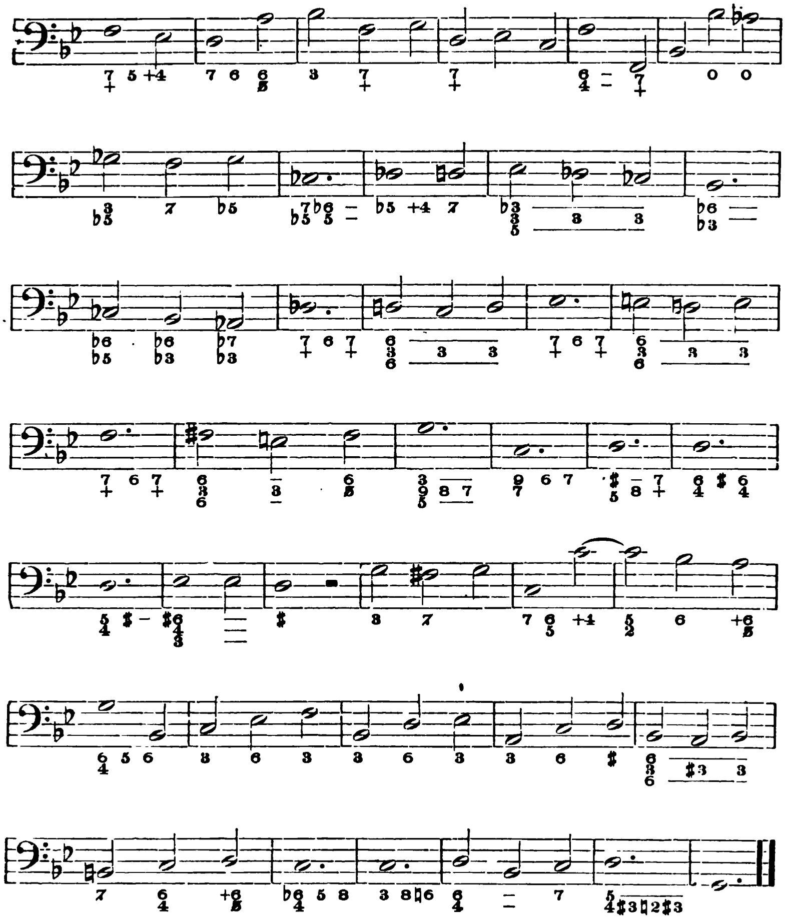


The fifth may be included in a 7–6 suspension, even though not indicated by a figure, i. e., when the two figures 7–6 stand alone.

EXERCISE.

ALEXANDRE GUILMANT.





THE PEDAL.

The *pedal* is a note which is prolonged, while harmonies, both those of which it forms an integral part, and others to which it is foreign, succeed each other. This pedal note is generally placed in the bass.

When the pedal note forms a dissonance with the harmony above, the part *next* above the bass is for the time being to be regarded as the real bass, and it should make no progression which would not be permissible were it the true bass.

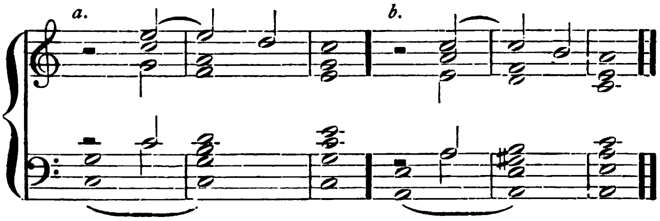
It is to be particularly noted that when the pedal bass is dissonant with the harmony above, it is not the pedal which seems to form the dissonance, but one or more notes in the harmony above. The pedal, by its inflexibility and persistence compels all dissonant harmonies to eventually return to a chord of which it forms a part.

As one of the particular characteristics of the pedal is to establish, or affirm the tonality of the original key, it will be readily understood why either the dominant or the tonic are usually chosen as the best notes on which to form it.

The pedal as a rule, is an integral note of the first and last chord of the harmonies above. A modulation may be effected in the harmonies above a pedal, and in such a way that this note and the chords above it are in different keys. These harmonies should move according to previous rules, i. e. the part next above the pedal should be regarded as the real bass, and the harmonies should succeed each other as though there were no pedal.

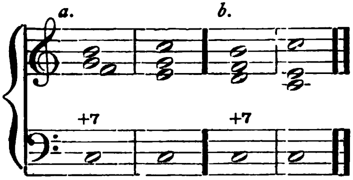
The tonic eleventh, and the tonic thirteenth are often employed on a pedal, as explained on page 92. These chords are nothing more than dominant seventh, or dominant ninth chords sounded on a tonic. They are often introduced in such a way that they include all the notes of the scale, either major or minor:

Ex. 115.



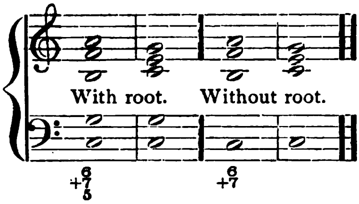
The dominant seventh, with, or without root, on a tonic, (tonic eleventh) is figured as follows:

Ex. 116.



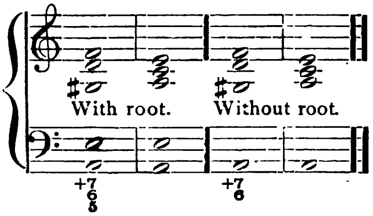
The major ninth, with, and without root, as follows:

Ex. 117.



The minor ninth, with, and without root, as follows:

Ex. 118.



The figuring in examples 116, 117, and 118 is for these chords when not prepared. When they enter with preparation, as suspensions, the chord is indicated by prolonging the figuring of the preceding chord. (See Ex. 113, page 92.)

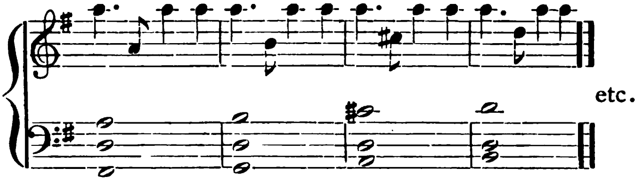
When four voices only are employed, the chords of the tonic eleventh, and the tonic thirteenth cannot be complete. The chords immediately preceding will usually determine which notes it is best to suppress.

The tonic and the dominant are often prolonged simultaneously, thus forming a double pedal.

Pedals in other voices than the bass are often employed. The following is an interesting example of a double pedal in the tenor and soprano.

BEETHOVEN.

Ex. 119.



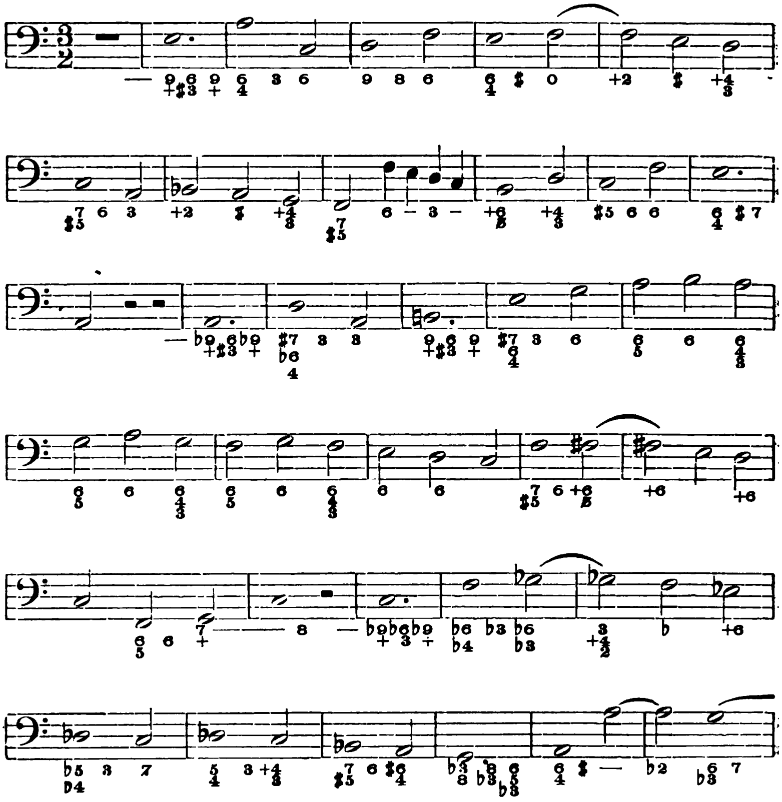
One of the most remarkable pedals ever written, is that found in Brahm's "Requiem," beginning on page 41 (Novello edition) and extending through 36 measures.

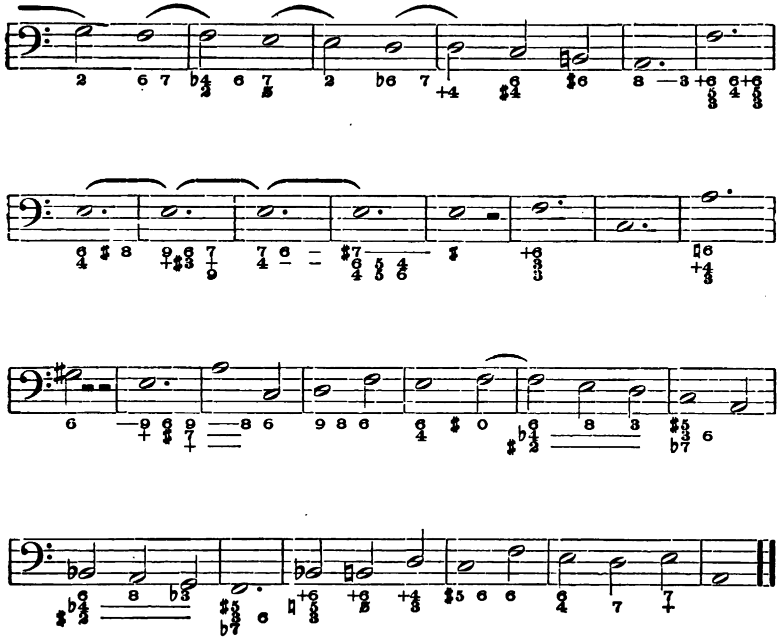
This extraordinary pedal, by which, it is claimed, the composer intended to convey the idea of the unchangeableness of God, is well worth careful study. It is too long to quote here.

The following is the last of the interesting and beautiful examples of modern harmony furnished this text-book by Monsieur Alexandre Guilmant. It is the most valuable of them all.—Attention is called to the sequences beginning at measures 17 and 33.—The dash which precedes the figure 9, in several places, so —9, indicates that the ninth is to be prepared, i. e, enter, alone, on the last part of the preceding measure.—The pedal, beginning at measure 40, is figured as clearly as it is possible to indicate such complex harmonies.

EXERCISE.

ALEXANDRE GUILMANT.





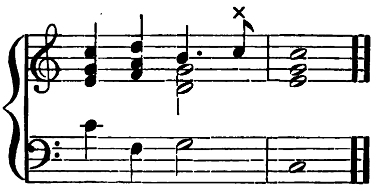
CHAPTER VI.

THE ANTICIPATION: THE APPOGGIATURA: THE EMBROIDERY: IRREGULAR RESOLUTIONS: PASSING-NOTES.

THE ANTICIPATION.

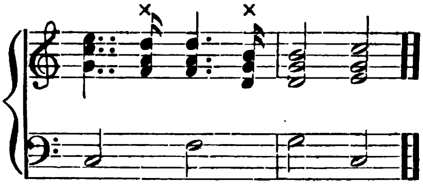
The *Anticipation* is a note which is sounded in advance of the chord of which it forms a part:

Ex. 120.



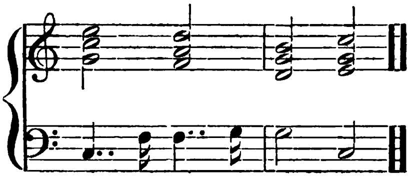
It may occur in several voices:

Ex. 121.



Although usually appearing in an upper voice, or voices, it may occur in the bass:

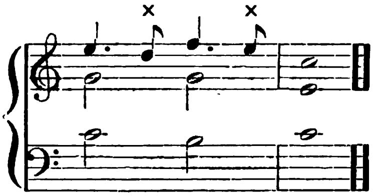
Ex. 122.



It usually occurs on a note or notes of short duration.—It will be noticed that this artifice of composition is the opposite of the suspension; the suspension holds back a note of the chord already sounded, while the anticipation precedes or anticipates it.

The anticipation may move to another note of the new chord at the time the harmony changes:

Ex. 123.

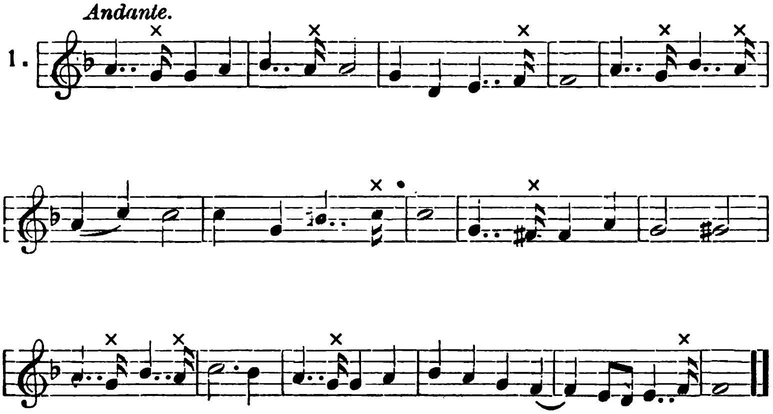


When this occurs, as above, the note so quitted will *usually* be taken by another voice, or else it may be understood as a possible note of the new chord. This, however, is not always necessary, as will be seen later on. Good illustrations of anticipation are to be found in Pt. I, Ex. 98. The anticipation is most effective in the soprano voice, and when it forms a dissonance.

In the following exercise the anticipation is indicated by a cross.

EXERCISE.

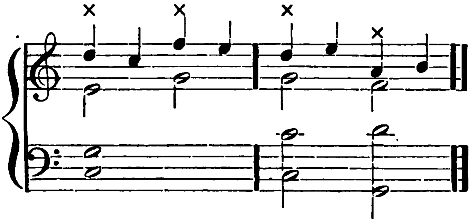
MELODY.



THE APPOGGIATURA.

The *appoggiatura*, like the suspension, is a note which momentarily occupies the place of the note to which it eventually moves. It is usually a note foreign to the harmony, and ordinarily comes on an accented part of the measure, resolving either up or down:

Ex. 124.

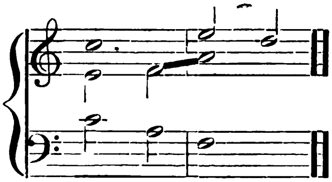


It will be seen from the above, that the appoggiatura is practically an unprepared suspension.

In consequence of the likeness existing between the suspension and the appoggiatura, the general rules given for the suspensions are applicable here.

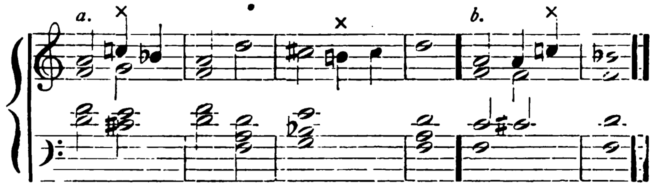
Fifths like the following, which are the result of an appoggiatura, are found in the compositions of the best writers, and are unobjectionable:

Ex. 125.



A note may be altered in one voice, while the same note, not altered, is sounded in another voice:

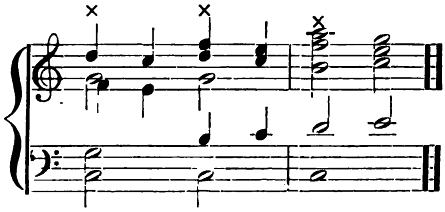
Ex. 126.



This form of the appoggiatura, i. e., with the note altered and not altered, as above, may be made most poignantly dramatic.

Appoggiaturas may be taken in different voices at the same time:

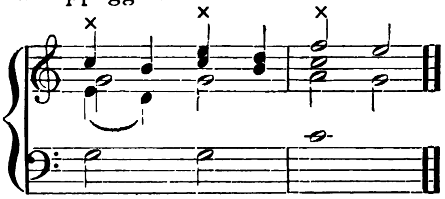
Ex. 127.



Certain appoggiaturas, presenting the appearance of chords already known and classified, may be analyzed two ways. The musical instinct alone can determine whether or not they are appoggiaturas.

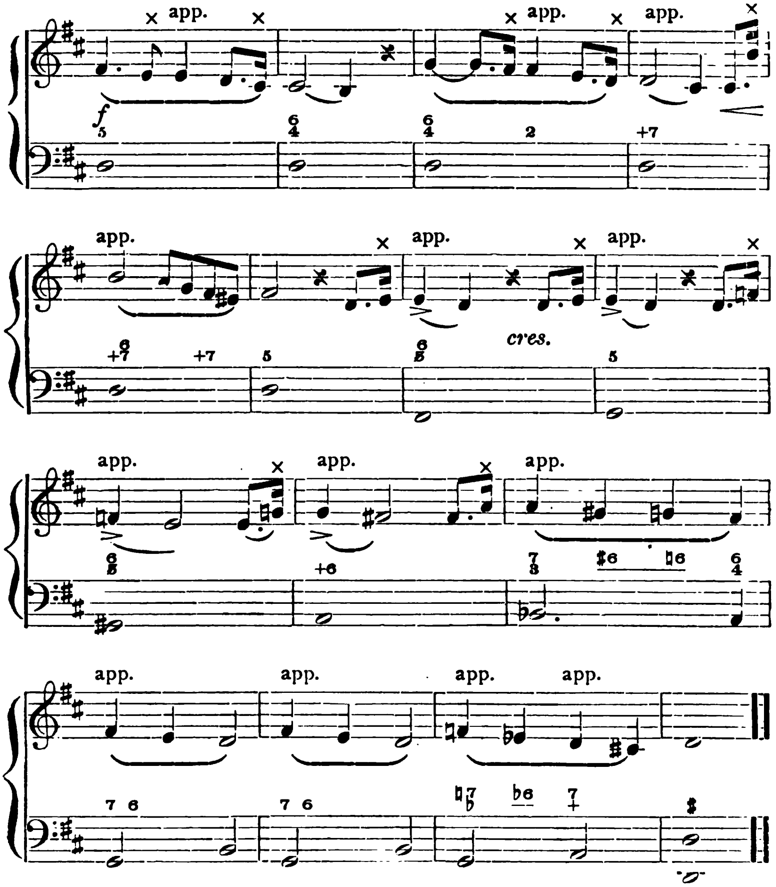
The following, although containing no dissonant notes, are unmistakably appoggiaturas. It is the accent which here gives the effect of an appoggiatura:

Ex. 128.



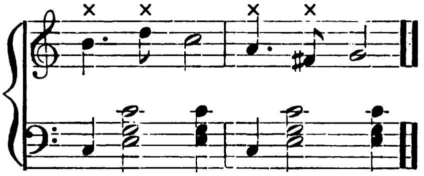
The appoggiatura is often preceded by a note of preparation which anticipates the appoggiatura. In the following extremely ineresting passage from "Hamlet," the anticipation is marked by a x. The harmonies are indicated by the figures:

AMBROIS THOMAS.



The principal note may be preceded by *two* notes foreign to the harmony, thus forming a *double appoggiatura:*

Ex. 129.

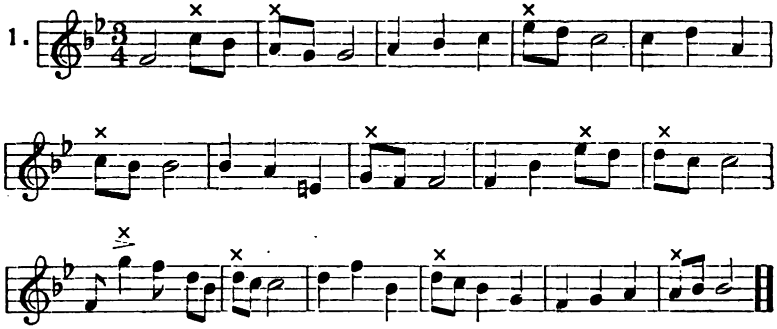


For illustrations of the appoggiatura which is more distinctly melodic, refer to Grove's Dictionary.

EXERCISE.

MELODY.

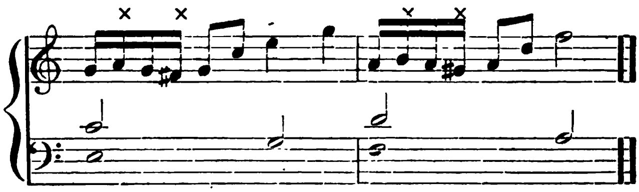
1.



THE EMBROIDERY.

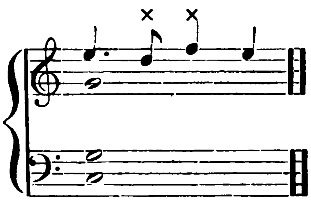
Another ornament which is much employed, consists in first sounding the principal note, then moving from it diatonically, after which the first note is again sounded:

Ex. 130.



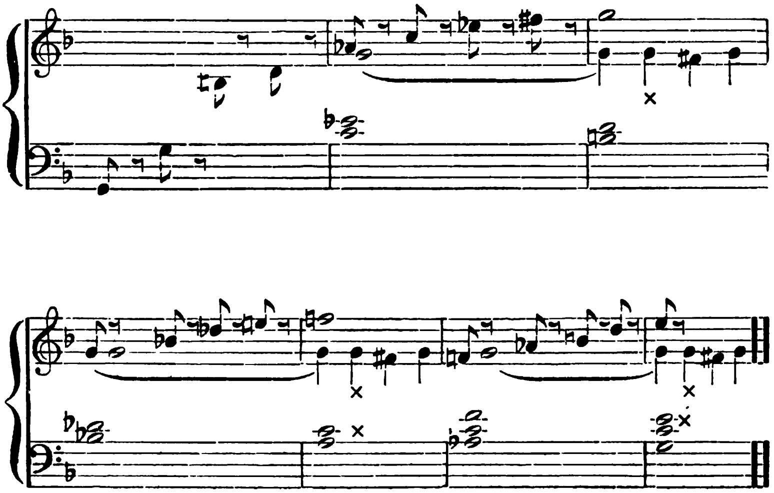
The embroidery includes the *trill*, the *turn*, and other familiar ornamental embellishments. It may be interrupted, like the anticipation or the appoggiatura, by moving to another note before making its resolution:

Ex. 131.



It may occur in any voice. The following is an interesting embroidery of an intermediate pedal:

BEETHOVEN.

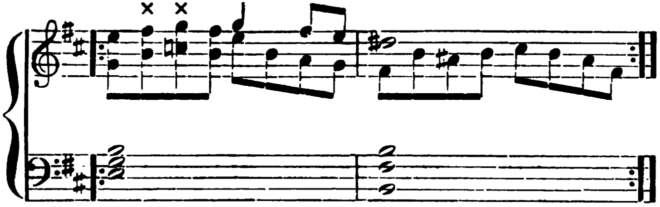


Consecutive fifths which result from an embroidery are as unobjectionable as the fifths which are the result of an appoggiatura. (Ex. 125.)

Passages like the following are of frequent occurrence in the works of Bach:

GLUCK.

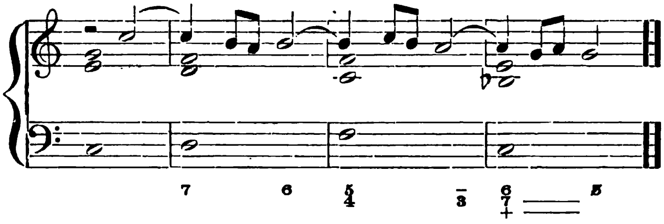
Ex. 132.



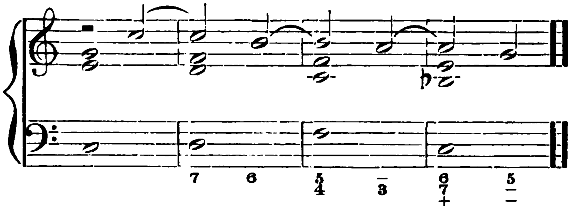
Embroideries in several voices may occur at the same time; their general treatment is the same as for simultaneous appoggiaturas. See Example 121.

A suspension may have an ornamental resolution. Embellishments like the following may be freely introduced in all succeeding exercises:

Ex. 133.

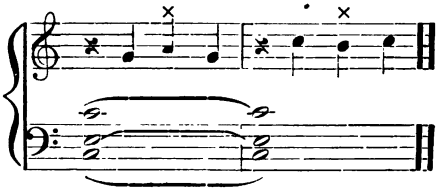


Instead of:



The Embroidery is often called either the "Neighboring-Note;" or the "Auxiliary note." The French term has here been used, because embellishments like the following:

Ex. 134.

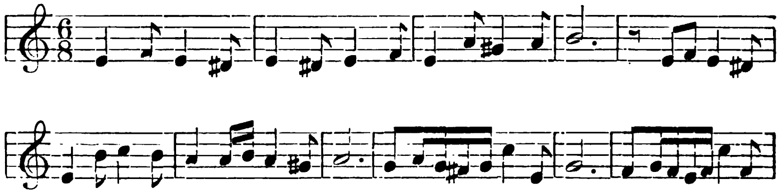


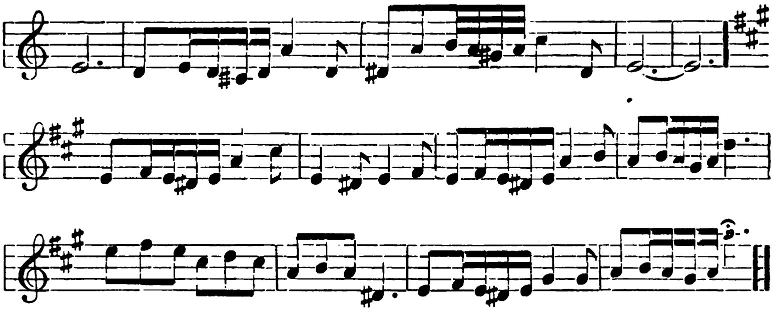
seem to be exactly described by the word *embroidery.*

EXERCISE.

MELODY.

Harmonize this with three voices only. Make the harmonies simple, introducing imitation.



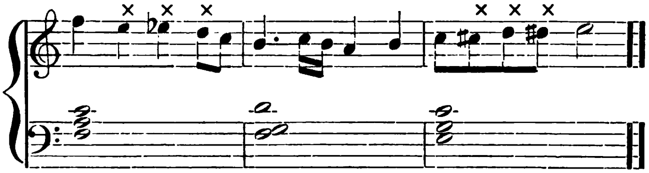


PASSING-NOTES.

The passing-note was considered on pages 37–38 of Pt. I. A fuller explanation of its use is here given.

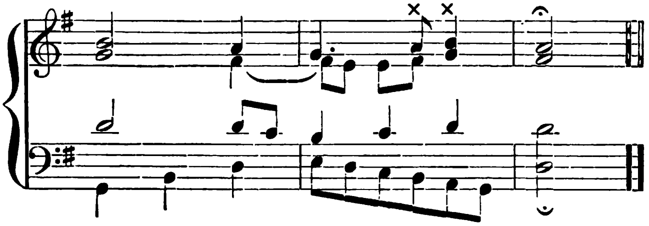
The passing-note is a note foreign to the harmony, passing diatonically or chromatically between other notes belonging to the harmony:

Ex. 135.



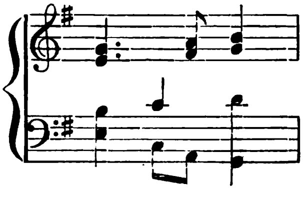
In the works of Bach, examples are very frequent in which chords change on a passing-note:

Ex. 136.



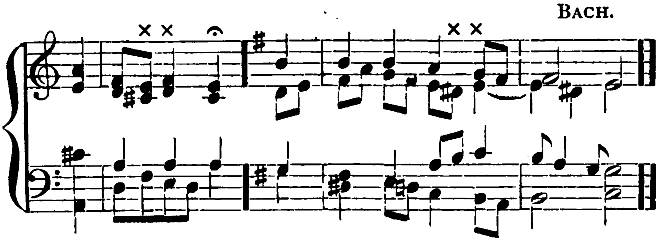
BACH.

Reduced to its elementary form, the second measure above is evidently as follows:



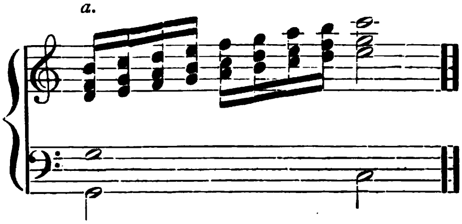
Here are two more remarkable examples of passing-notes from the same source:

Ex. 137.

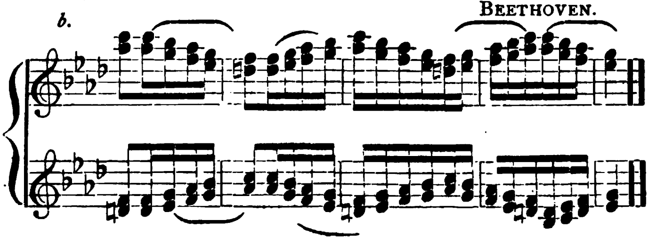


Passing-notes may occur in several voices at the same time:

Ex. 138.



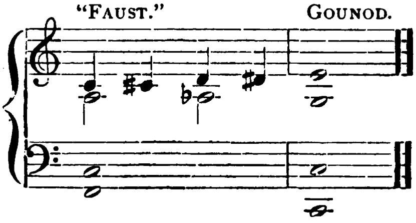
Ex. 139.



The example from Beethoven is an illustration of passing-notes in contrary motion on dominant ninth harmony.

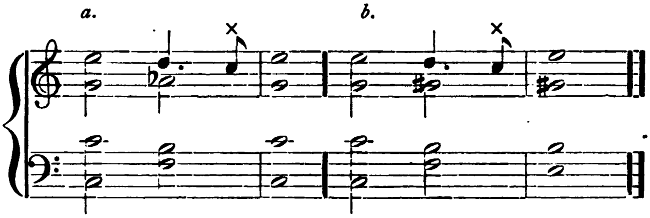
A passing-note may be ornamented by either an appoggiatura or an embroidery. In general, the passing-note is the most important of all the embellishments discussed in this chapter. It is not treated at greater length here for the reason that it is one of the principal artifices of counterpoint. Many of the most delicate and charming successions which surprise the ear in modern harmonies are the result of chromatic passing-notes:

Ex. 140.



Besides the ornaments specialized in this chapter, there are many embellishments which are not regularly resolved, i. e, which do not resolve either diatonically up or down. Such notes usually anticipate one of the notes of the following chord, as at *a*, although progressions like that at *b* are not infrequent:

Ex. 141.

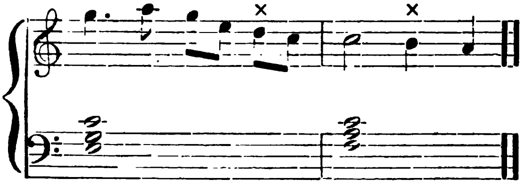


Here the passing-note in the soprano is resolved in the tenor.

Many of the ornaments discussed in this chapter may be analyzed in two ways, *when taken alone*, i. e., as abstract progressions. It is that which precedes and succeeds such progressions, and especially the part of the measure on which they occur, which will usually determine the best analysis.

The notes marked with a cross x may be analyzed either as passing-notes, or as appoggiaturas.

Ex. 142.



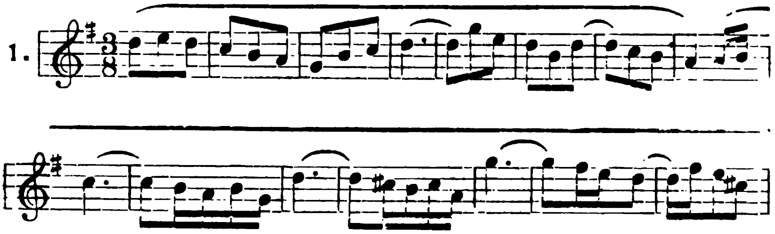
The two succeeding melodies do not necessarily include all the artifices discussed in this chapter.

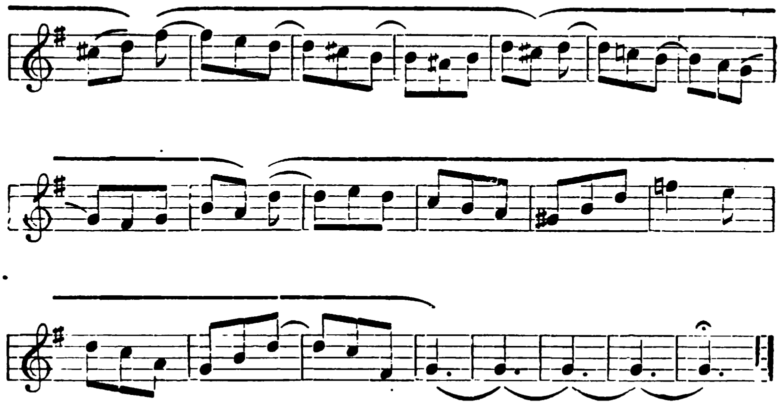
EXERCISES.

Eugène Gigout

Andante.

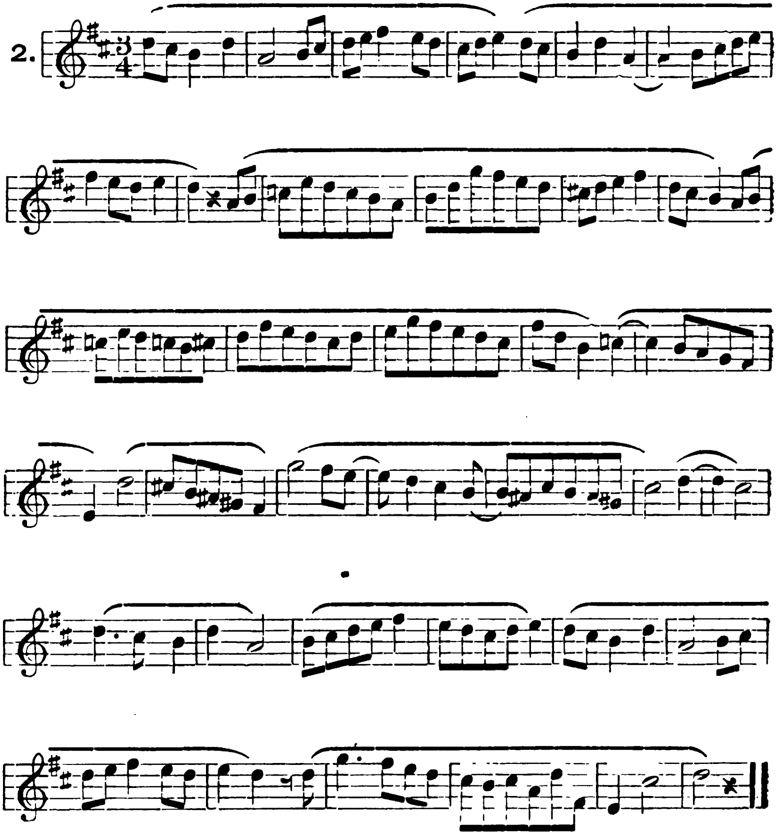
1.





Andantino. EUGÈNE GIGOUT.

2.



CHAPTER VII.

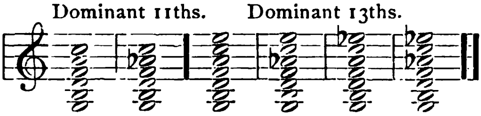
ANALYSIS: CHORDS OF THE DOMINANT ELEVENTH AND DOMINANT THIRTEENTH: HARMONY IN MORE THAN FOUR VOICES; CHROMATIC HARMONY: HARMONIC ANALYSIS OF "LOHENGRIN:" "TRISTAN AND ISOLDA."

CONCLUDING EXERCISES.

After concluding a course outlined in a modern text-book on harmony, the student may fairly ask, Does this system enable me to analyze modern harmonies with security? If it does not, then the theories exploited are manifestly inadequate; that is to say, the student's ability to analyze should be one of the final tests of the adequacy of a treatise on harmony. We submit the theories formulated in this book to that test, choosing for analysis two examples from Wagner.

In this analysis no use is made of the so-called "chords of the dominant eleventh," or "chords of the dominant thirteenth," which are so conspicuous in certain modern English text-books, and for this reason: Four-part writing is considered the foundation of harmony, and with only four voices it is almost impossible to suggest chords containing so many notes as the following:

Ex. 143.



In four-voiced harmony, any combination of the above notes that we have yet seen may preferably be analyzed according to principles already set forth in the preceding chapters. Such chords usually produce suspension-like effects and may be paralleled by examples in Chapter VI.

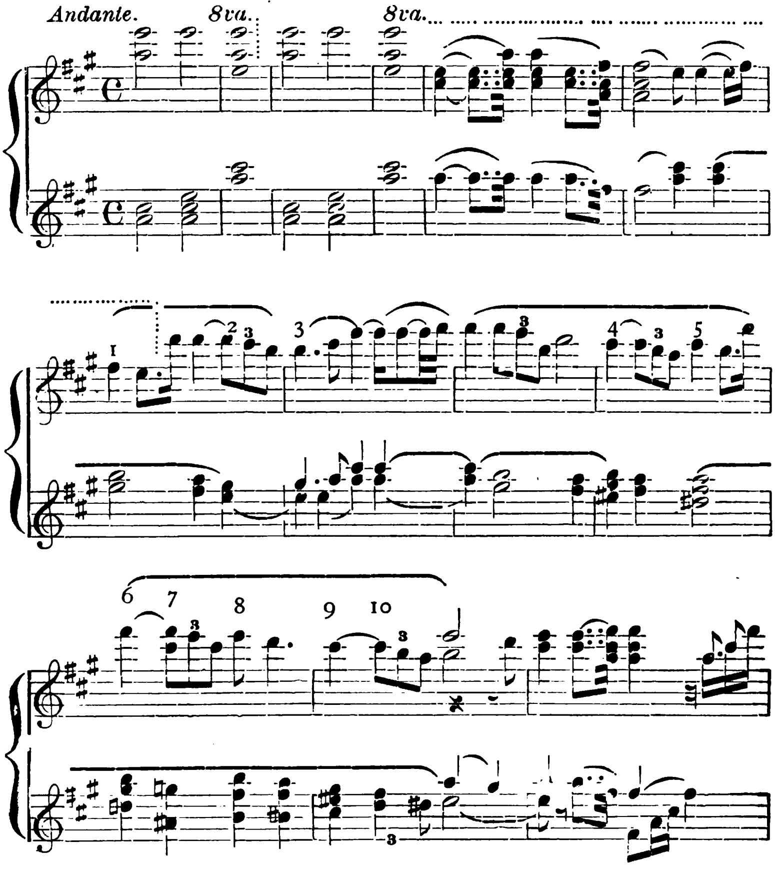
Harmony in more than four voices is not introduced here.

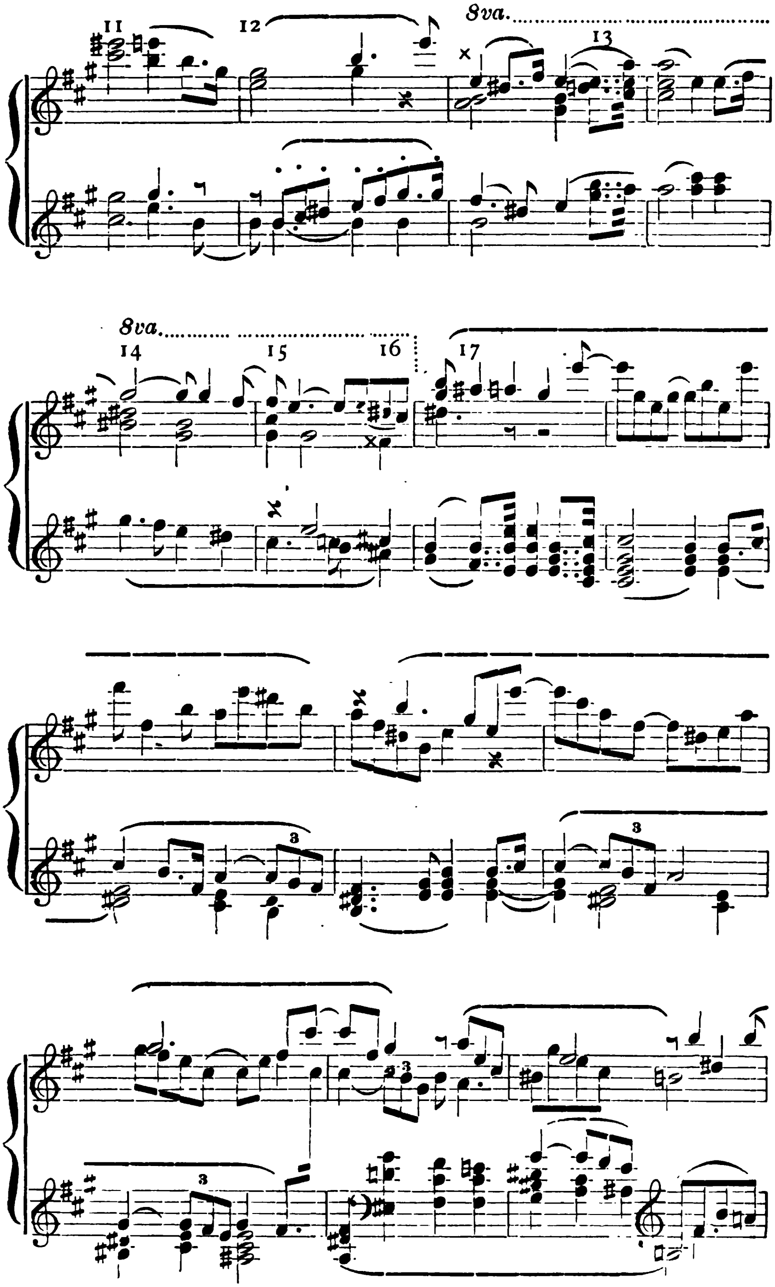
Chromatic harmony has not received a special chapter. It would seem best not to call undue attention to chromatic progressions. The exercises throughout Pt. II introduce an unusually large number of such chords, but they appear as passing-chords, or are made to serve the purpose of modulation. All chromatic harmonies should be introduced in such a way that they do not destroy the feeling of tonality, unless there is a sufficient esthetic reason.

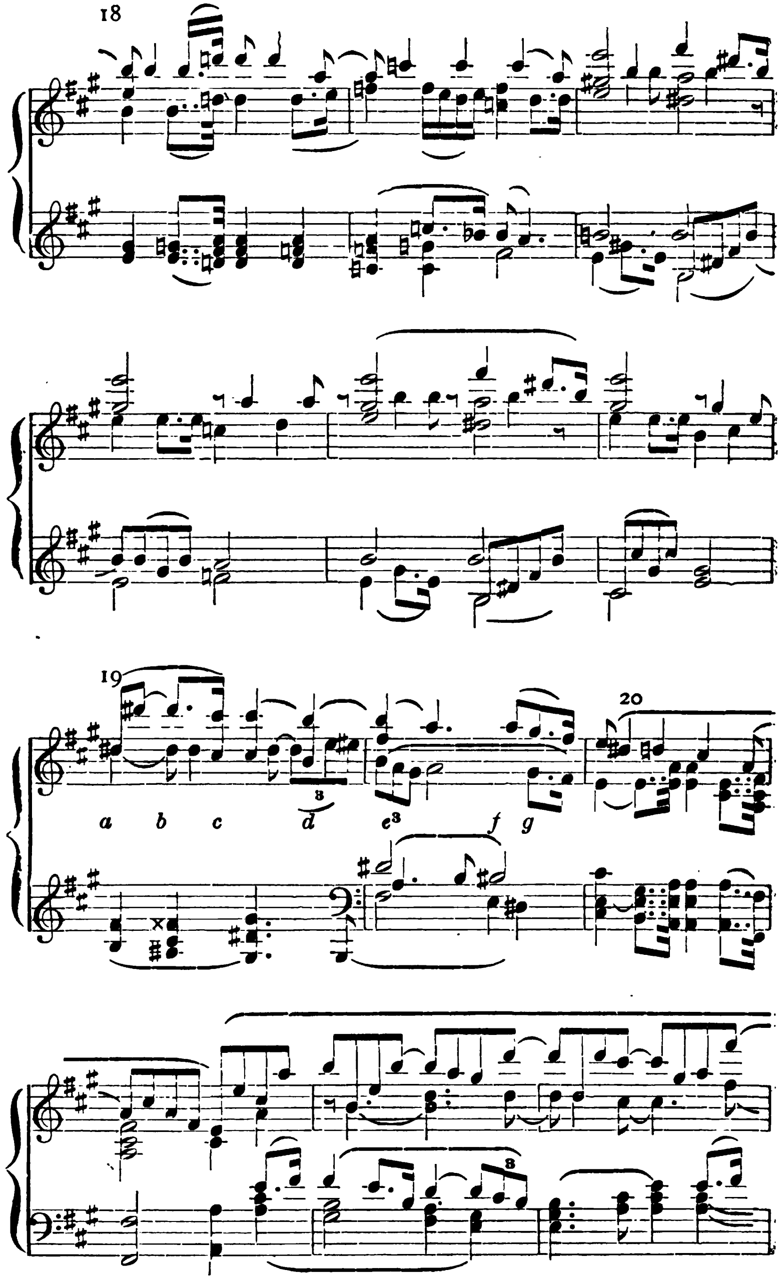
One should keep in mind the fact that the academic study of harmony does not include musical esthetics, and that one of the chief purposes of this treatise is to teach the orthography of music. At the same time it is hoped that original work has been encouraged. Efforts in this direction, even though they contain technical faults, are of value to the degree that they develop the imagination. By thus making use of material gained, will harmony be made "practical."

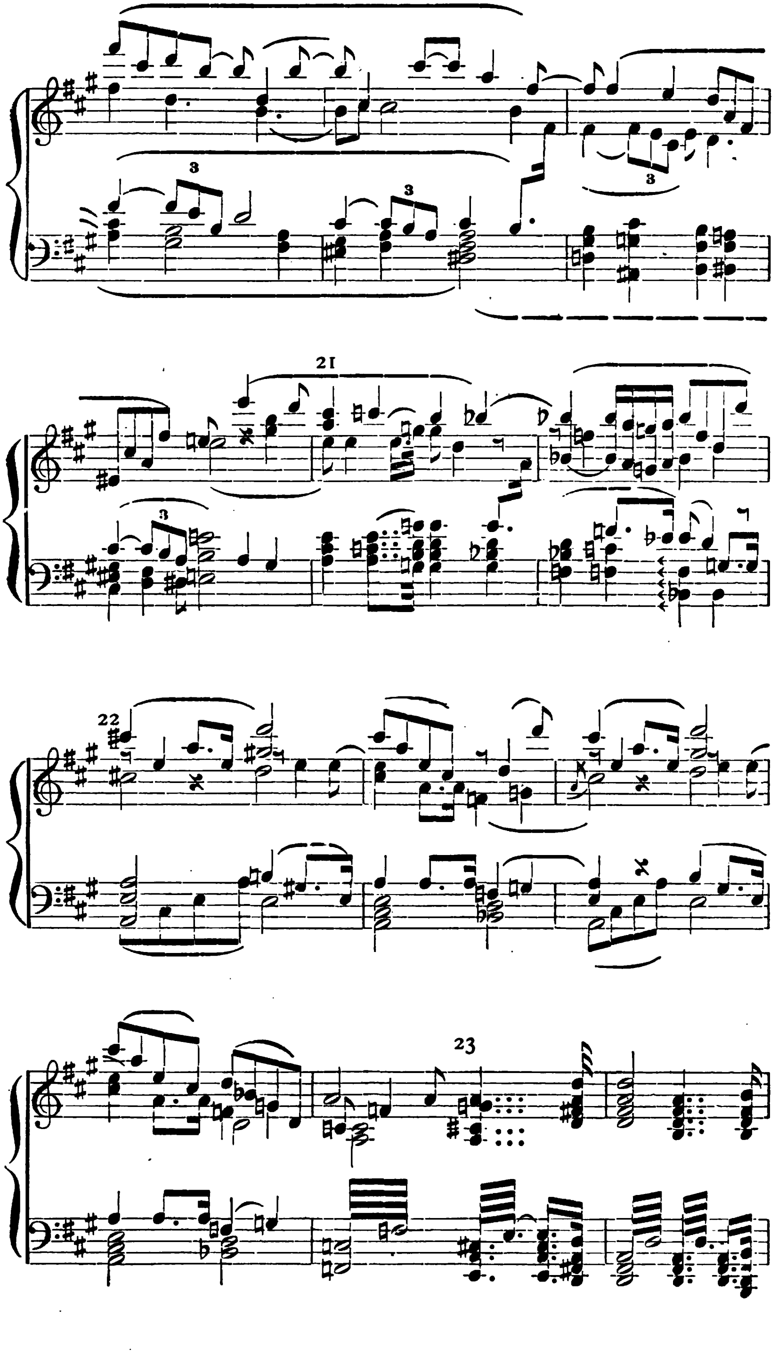
PRELUDE TO LOHENGRIN.

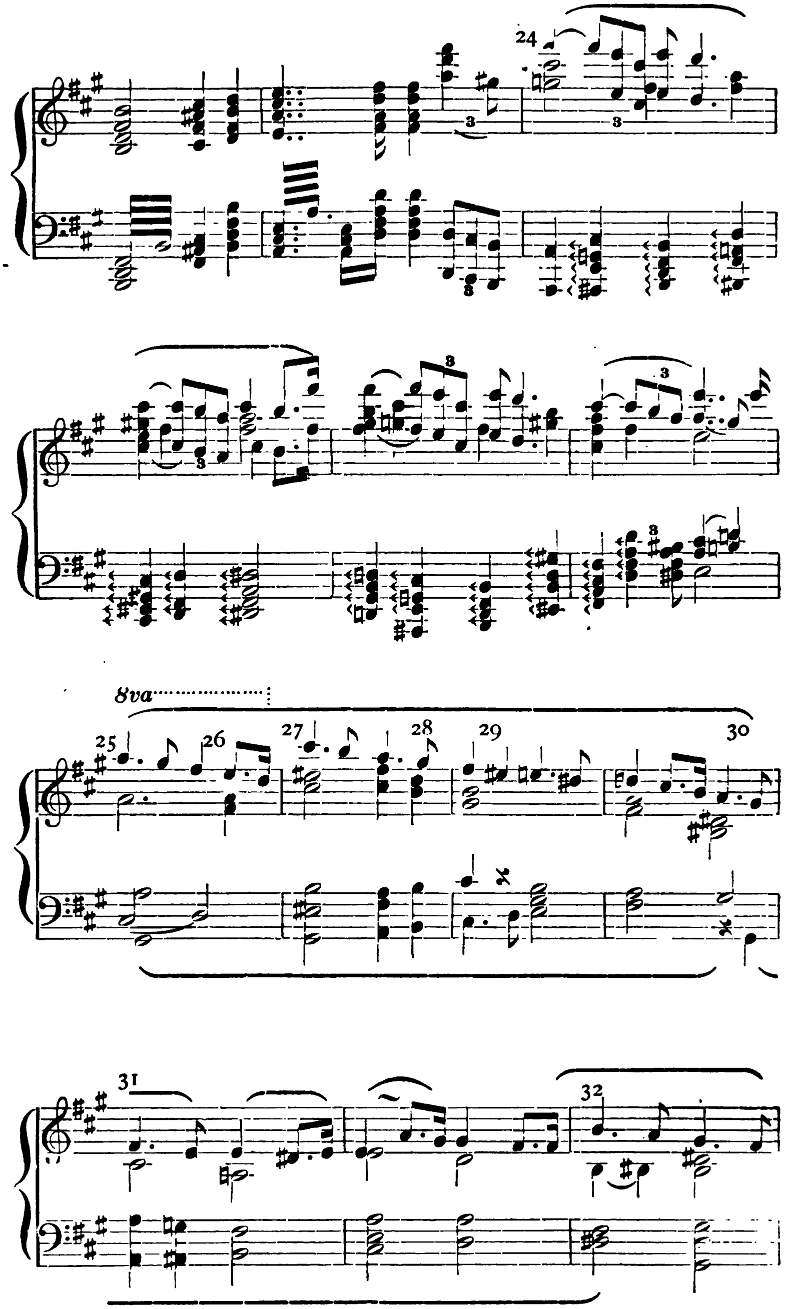
R. WAGNER.

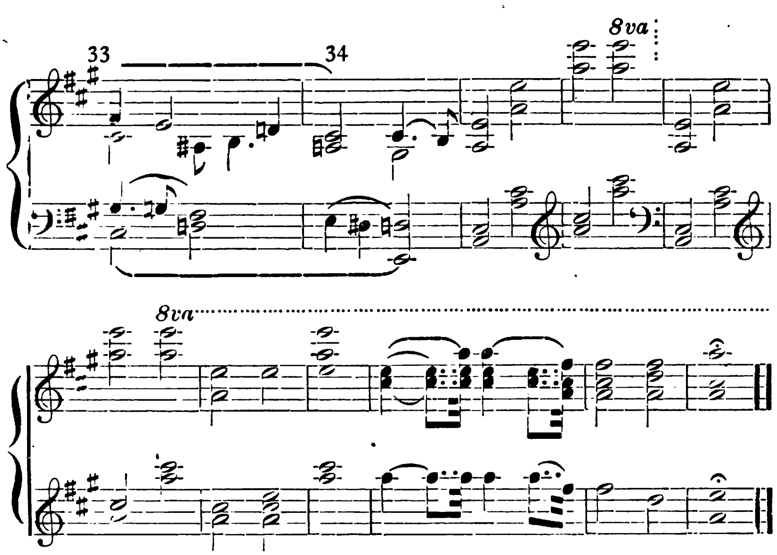



8va.
8va.


18
19
a
b
c
d
e3
f
g
20
8




8va



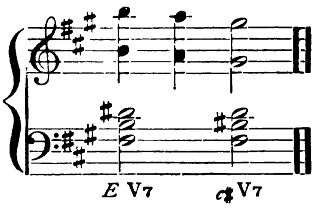
The Prelude is in A; the five nearest related keys are E, D, f♯, c♯, and b. (See page 61, Pt. I.)

At 1 the chord may be analyzed either as an incomplete ninth chord with third in the bass, or as a 7-6 suspension; on account of the frequent use of the incomplete ninth chord throughout the Prelude, it is preferably a ninth.—At 2 the harmony is dominant, the suspension in the soprano on D moving to B by a passing-note on C♯.—At 3, the chord, although apparently a simple dominant triad, is preferably a retarded tonic; the tonic is anticipated in the two upper voices on the second half of the second count, the full tonic triad appearing on the third count.—At 4 occurs the first chord outside the original key; a dominant seventh on C♯ resolving regularly to its tonic.—At 5 is a major ninth on B, without root, in the key of E, the dominant of the original key.—At 6 a ninth without root with seventh in the bass on the dominant of the original key.—At 7 appears a suspension of the seventh in a minor ninth chord without root. (See Example 112, page 90.)—At 8 is an appoggiatura in the soprano. The ascending B♯, as well as the notes above appearing with this note, are preferably analyzed as passing-notes. If these notes came on a strong accent they would give the character of an independent chord.—The chord at 9 does not in any sense give the impression of a tonic; this chord is the dominant of F♯.—At 10 is a 7-6 suspension. The D♯ is a chromatic passing-note and the A is an anticipation of the following appoggiatura.—11 is to be analyzed as 9.

Although the chords at 4, 5, 7, 9 and 11, are *as abstract chords* in keys outside the original tonic, these harmonies are preferably analyzed as passing-modulations. No modulation has thus far taken place. (See pages 71–72, Pt. I.) At 12 there is a brief modulation to the dominant, introduced on a six-four chord as explained in Pt. I, returning to the original tonic at 13.

The cross between 12 and 13 indicates an appoggiatura in the soprano—At 14 the chord is the dominant of c♯. In the lowest part is an example of passing-notes; here the E might be analyzed as an appoggiatura moving to the fifth of the chord. This dominant chord eventually resolves to its tonic.—At 17 the opening harmonies appear in E, with a delicate figuration above. From here to 18, all that was true of the harmonies in A from 1 to 17 is here true of E, the dominant.

At 18 is introduced one of the principal modulatory passages of the opera. The harmonies here are simple and require no analysis. —At 19 appears the first passage which is at all complex. The preceding harmonies have been in the key of E. At *a* the chord is simply dominant; at *b* the chord is a dominant seventh on D♯ in second inversion; at *c* this dominant seventh resolves to its tonic g♯ with a suspension of its third in the upper and an intermediate part; at *d* this suspension resolves while the next to the upper part introduces passing-notes; at *e* the dominant of the key of E again appears; at *f* occurs a passage not unlike the one from Bach, Example 136. Reduced to its most elementary harmonic form the measure is evidently as follows:



As introduced in the score the E in the bass is an appoggiatura to D♯ the fifth of the chord, the root entering at *g* on the fourth count with the resolution of the appoggiatura in the bass.

All this passage at 19 is preferably analyzed as passing-chords in E. At 20 the opening again reappears in the original key with a figuration above not unlike that at 17.—At 21–22 the modulatory passage at 18 reappears.

At 23 the theme is apparently to be taken up in D, the subdominant of the original key.—At 24 it returns to the same harmony as at 6, here filled out to give the *forte* effect.—At 25 the dominant seventh chord makes a resolution to the sixth degree.—At 26 is a 7-6 suspension with the suspended note resolved in an intermediate voice.—At 27 a dominant seventh chord in the key of f♯, fifth in bass, resolving to tonic.—At 28 another 7-6 suspension.—At 29 an appoggiatura resolving to the third of a dominant seventh chord with a passing-note in the bass.—At 30 an appoggiatura resolving to the root of a triad.—At 31 a suspension the same as at 7.—At 32 the first chord is a simple triad on B; the second is a diminished seventh chord with a suspension in the soprano.—At 33 the first count represents an appoggiatura in the soprano, resolving to the third of the chord; a chromatic passing-note is introduced on the second half of the second count. On the third count the alto takes an appoggiatura resolving up to the root of the chord, while the soprano suspends the third, resolving on the fourth count.—At 34 a six-four chord affirms the original key which is not again quitted.

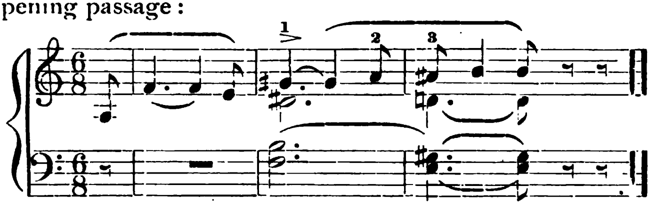
Reduced to this analysis, the Prelude to "Lohengrin" is seen to be largely confined to the keys of the tonic, and the dominant. There are few chords which are not in the so-called nearest related keys. Comparatively few dissonant chords are introduced; the dissonant effects are largely produced by the use of the suspension, the appoggiatura, and the passing-note.

TRISTAN AND ISOLDA.

The *Introduction* to "Tristan and Isolda" is too long to quote in its entirety. Only those harmonies will be discussed which are so puzzling to the average harmony-student.

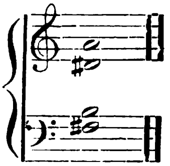
The opening passage:

Ex. 144.



is in the key of *a* closing on the dominant seventh of that key. The chord at 1 is a retarded altered chord on the dominant of the dominant (B), the appoggiatura resolving at 2. The dominant seventh chord on the dominant of the dominant of *a*, with fifth in bass would stand so:

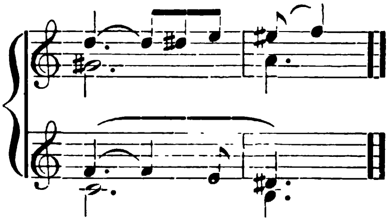
Ex. 145.



To make this an altered chord, according to explanation in Chapter V, the fifth should be lowered. This alteration gives us the chord at 2 in the preceding passage. The G♯ at the beginning of the measure is an appoggiatura resolving up to *a*, the seventh of the chord.

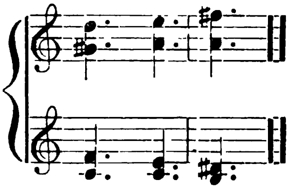
This passage:

Ex. 146.



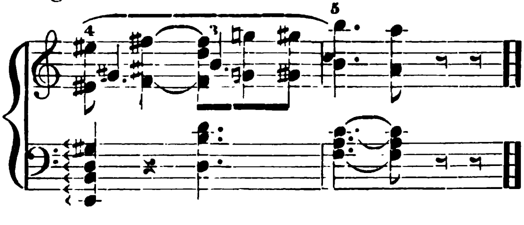
reduced to a more elementary form, and stripped of all artifices would stand more like the following:

Ex. 147.

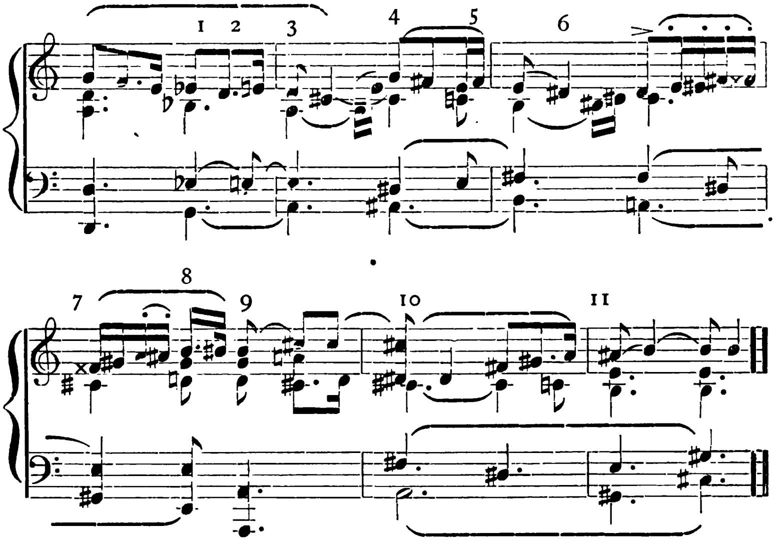


Here appear three appoggiaturas, two resolving up, (soprano and alto,) and one down (tenor). As it stands in the original, the appoggiatura in the soprano chromatically ascends, while the alto retains its note after the soprano and tenor have both resolved, thus changing into a retardation, resolving regularly to a note which at the moment of resolution becomes another dissonance.

The passage:



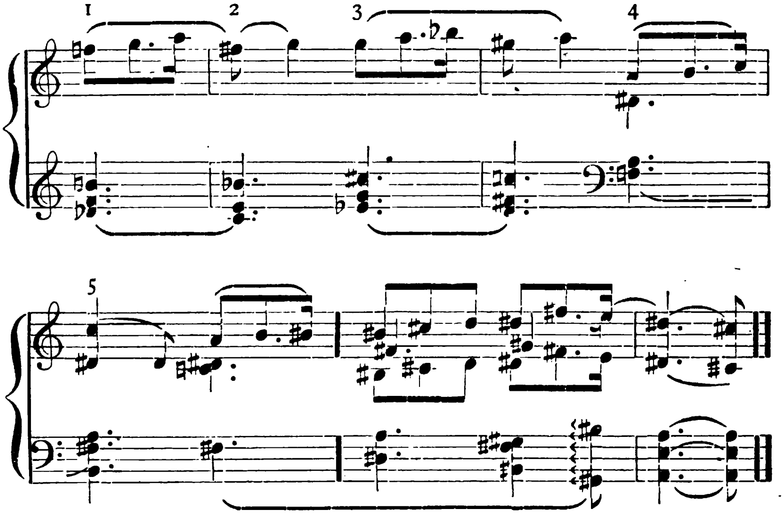
at 4 presents an upward resolving appoggiatura to a major ninth, which in turn becomes a sort of retardation resolving chromatically to the third of the chord, G♯. This dominant harmony in *a*, resolves at 5 to the sixth degree of the scale, with an appoggiatura resolving down to the third of the chord. The following passage:



opens in *d*. The chord at 1 which would be a diminished triad in the scale—*e*, *g*, *b*♭—is made major by flatting the E. The *d*, at 2, is a passing seventh, embroidered and suspending the third of the dominant at 3. At 4 the harmony is evidently a minor ninth on F♯, without root and with an appoggiatura in the tenor resolving to *e*, the seventh of the chord. At 5 the seventh appears, more as a passing-note, in both soprano and tenor, with a descending alteration of the fifth in the alto. The chord resolves at 6 as altered chords regularly do resolve, to a dominant. From 6 to 7 the harmony remains on the dominant of E. At 7 the C♯—the ninth of the preceding harmony—is held into the succeeding harmony. This chord at 7 may be analyzed either as a passing six-four chord on C♯ with an appoggiatura in the soprano followed by passing-notes, or as a tonic on E with a suspension of the fifth in the alto making an irregular resolution at 8. On account of the context the latter analysis is preferable. At 9 appears an altered tonic eleventh chord. At 10 the ninth in the upper voice skips to another note of the chord.

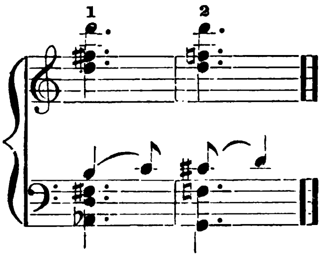
This whole measure is built on the dominant of E. At 11 this dominant harmony resolves to its tonic with an appoggiatura in the upper part. Notice that in each instance when there is a note suspended and resolved at the same time, these two notes are separated by another note. (See Examples 23–24, page 86, and Examples 108–111.)

The following successions, regarded as altered chords on the dominant of the dominant, present no difficulties:



At 1 the chord is an altered chord on G, with root appearing on second note and *major* ninth on last.—At 2 this chord resolves to the chord of C with an appoggiatura in soprano.—At 3 an altered chord on A with *minor* ninth, resolving to D.—At 4 the altered chord is on B, changing chromatically to the same chord *not* altered at 5.

The chords:



are: at 1 an altered dominant seventh of D with an appoggiatura to the seventh in an intermediate voice; at 2 this chord resolves to the dominant seventh on G with an appoggiatura to the fifth.

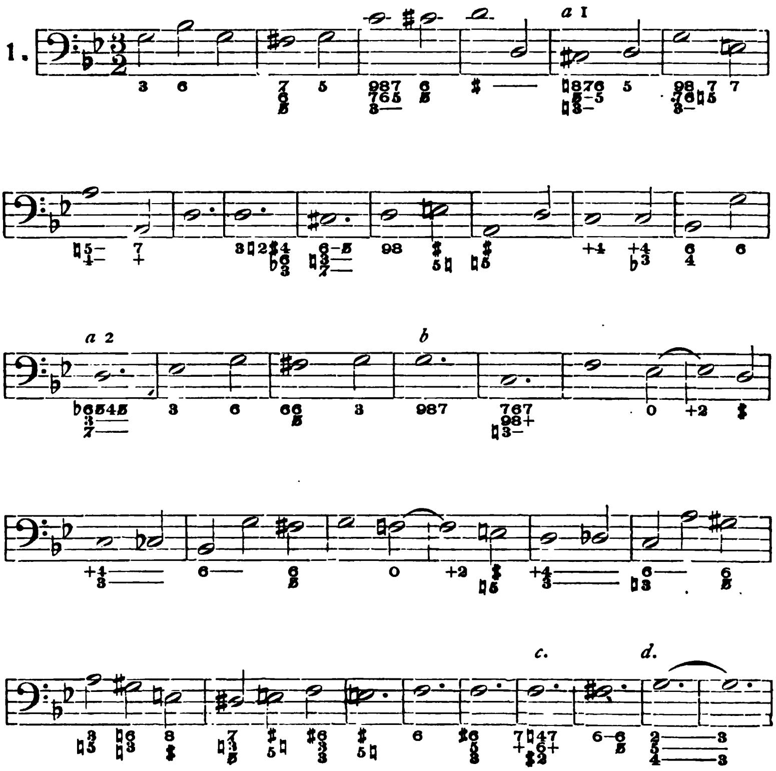
This includes the chords in this "Introduction" which are the most complex.

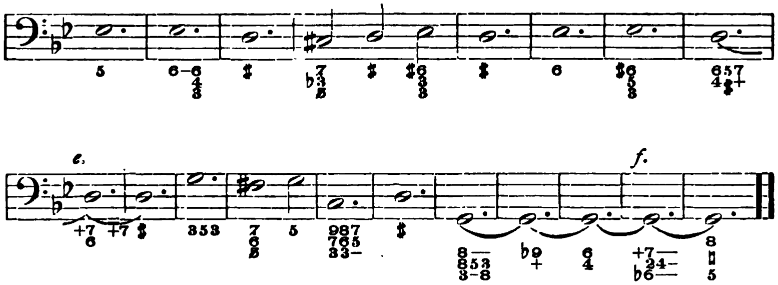
These harmonies may be analyzed in other ways. All that is claimed for that offered here is that it is simple and proves the assumption that the theories brought forward in this book are sufficient to enable the student to analyze modern harmonies.

The concluding exercises are purposely not figured so fully as the preceding lessons have been. In the basses by Monsieur Eugène Gigout there are many passing-notes which are not indicated as such.

EXERCISES.

1.





a 1. Introducing a chromatically altered note, with the same note not altered in another voice. See Ex. 126.

a 2. The same as above, introducing an embroidery in the soprano.

b. Introducing an appoggiatura in the alto.

c. Enharmonic change in the alto.

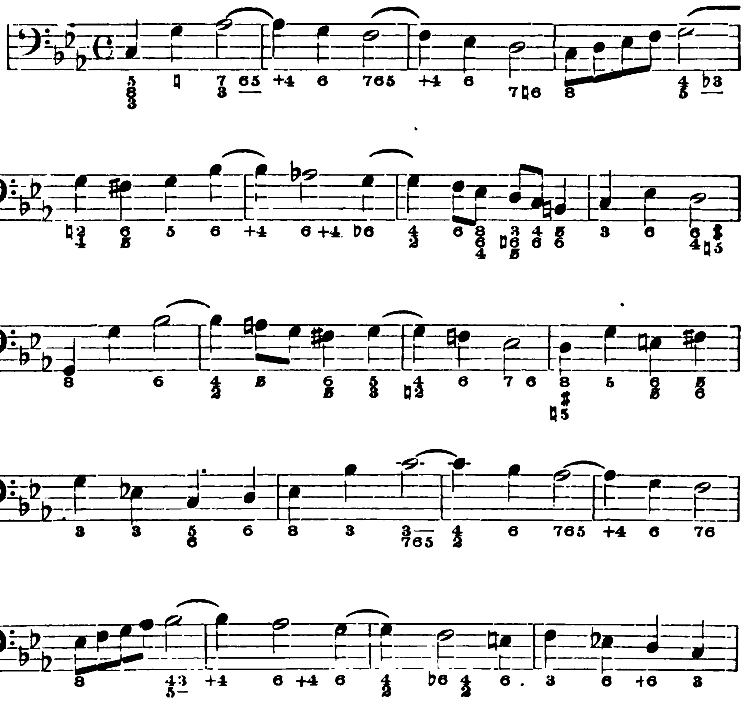
d. Introducing a retardation in the soprano and a suspension in the tenor

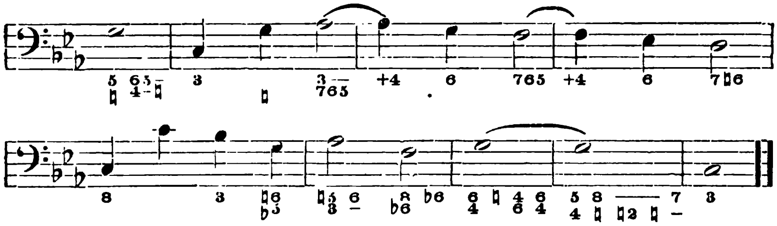
e. See Examples 117, 118.

f. Introducing a tonic thirteenth chord.

EUGÈNE GIGOUT.

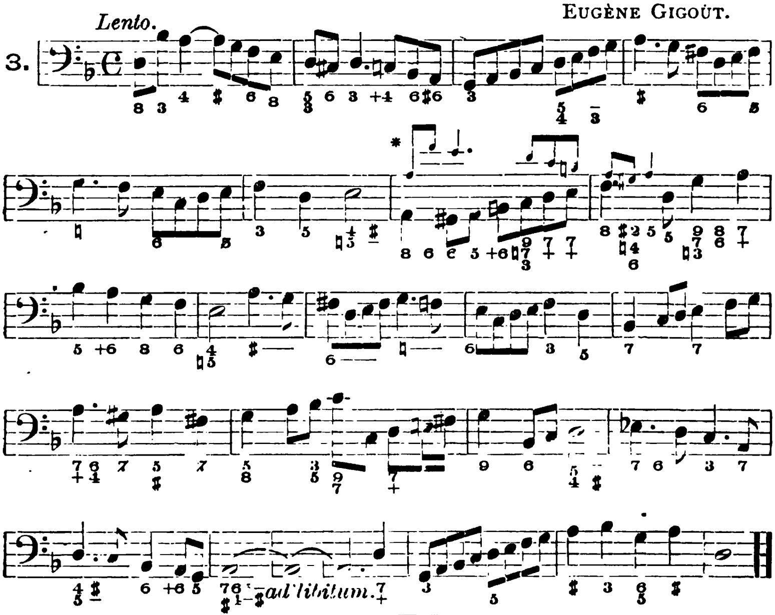
2.



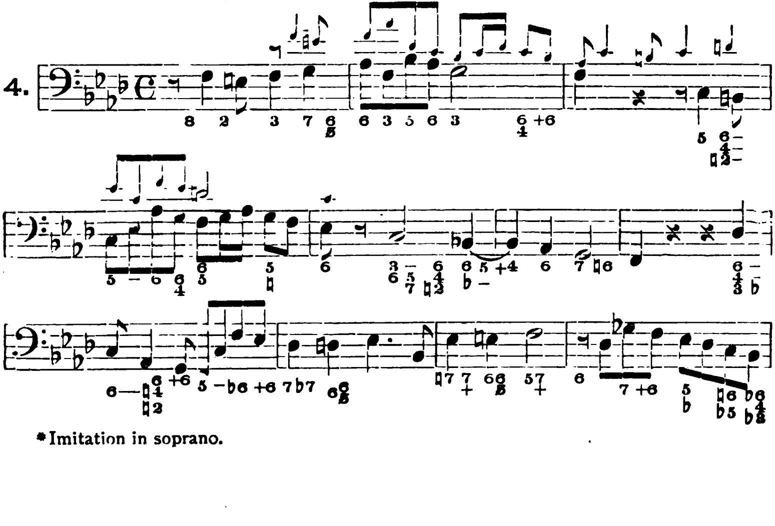


EUGÈNE GIGOÛT.

3.

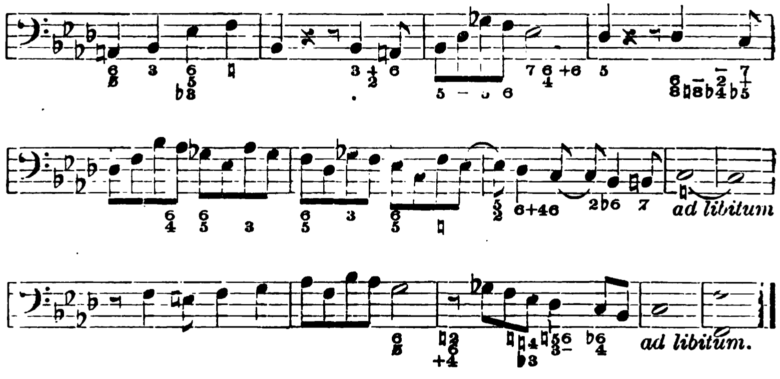


4.



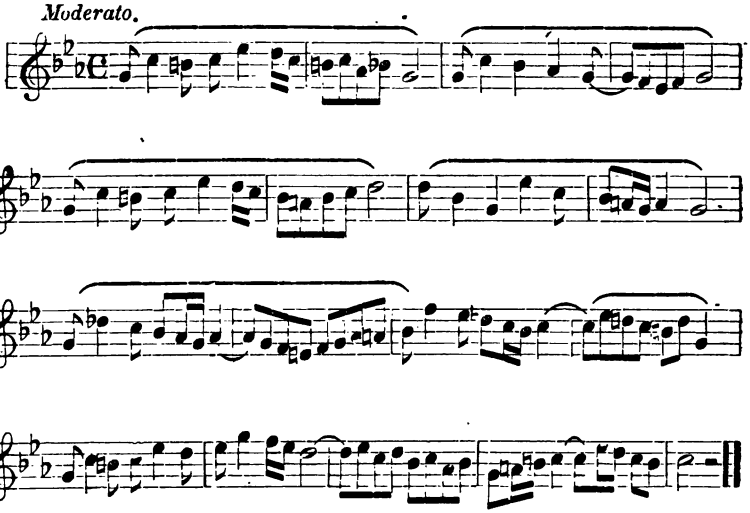
---

*Imitation in soprano.



EUGÈNE GIGOUT.

5.



In conclusion we strongly advise the student to further familiarize himself with the French theories by working out the exercises in "Eighty-seven Lessons in Harmony," by Théodore Dubois, published by H. Heugel & Co., Paris. These exercises were written for the classes at the Paris Conservatory, and many of them appear as harmonized by first prize pupils. These are interesting as showing the proficiency one must attain before competing for this prize. As the figuring given in "Practical Harmony" is precisely the same as that in use at the Paris Conservatory there will be no difficulty in understanding the work mapped out by Monsieur Dubois.

14 DAY USE
RETURN TO DESK FROM WHICH BORROWED

MUSIC LIBRARY

This book is due on the last date stamped below, or
on the date to which renewed.
Renewed books are subject to immediate recall.

APR 24 1964

INTER-LIBRARY
LOAN

APR 13 19

LD 21-50m-1,'63
(D6471s10)476

General Library
University of California
Berkeley

GL 67429425E

238231
MT
50
N6
V.2

THE UNIVERSITY OF CALIFORNIA LIBRARY

DATE DUE

Music Library
University of California at
Berkeley